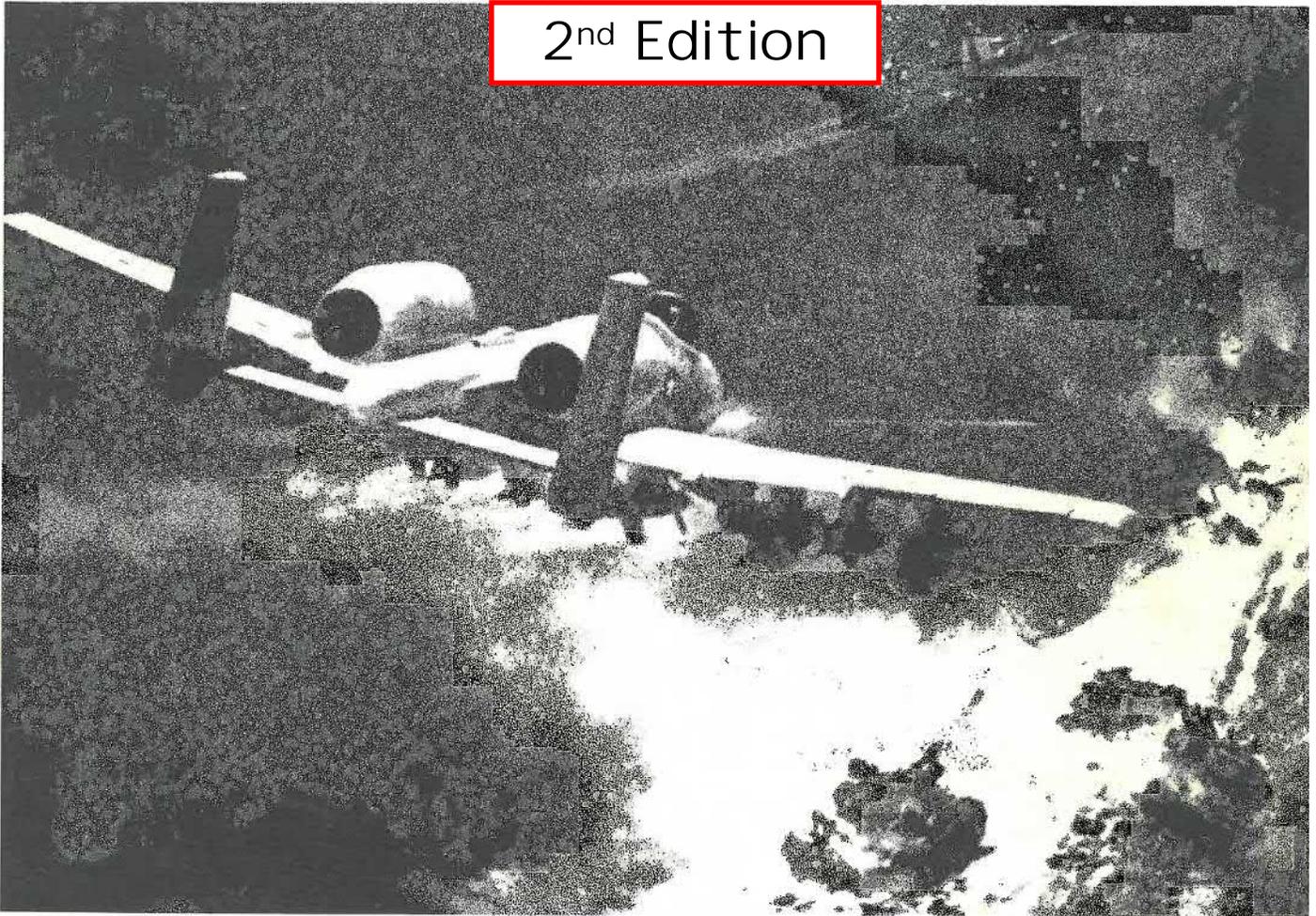


TAG AIR

2nd Edition



BATTLE MANUAL



The Avalon Hill Game Company

TABLE OF CONTENTS

THE BASIC GAME RULES FOLDER

GAME INTRODUCTION	Page 1
1.0 GAME COMPONENTS	Page 1
2.0 BASIC GAME SETUP AND PREPARATION FOR PLAY	Page 1
3.0 BASIC GAME SEQUENCE OF PLAY	Page 1
4.0 GENERAL BASIC GAME RULES	Page 1
4.1 Player/Side Definitions.....	Page 1
4.2 Zones of Control.....	Page 1
4.3 Stacking Units.....	Page 2
4.3.1 Movement Through Other Units.....	Page 2
4.3.2 Permanent Air Unit Stacking—Escorts.....	Page 2
4.4 Terrain Elevation Levels.....	Page 2
4.5 Basic Game Lines of Sight.....	Page 2
4.6 Air Unit Facing.....	Page 2
4.7 Entering and Exiting the Mapboard.....	Page 2
4.8 Ranges and Spans.....	Page 2
5.0 THE BASIC GAME PREPARATION PHASE	Page 2
5.1 The Disruption Removal Step.....	Page 2
5.2 The Depletion/Fired Change Step.....	Page 2
5.3 The Air Allocation Step.....	Page 2
5.4 The Ground/Helicopter Check Step.....	Page 2
6.0 GAME MOVEMENT	Page 2
6.1 General Rules of Movement.....	Page 2
6.2 Number of Units to Move.....	Page 2
6.3 Movement Points.....	Page 2
6.4 Movement Costs.....	Page 3
6.5 Movement Restrictions.....	Page 3
6.5.1 Minimum Ground and Helicopter Movement.....	Page 3
6.5.2 Lake Movement.....	Page 3
6.5.3 Special Air Unit Movement Rules.....	Page 3
6.5.4 Special Artillery and Air Defense Movement Rules.....	Page 3
7.0 BASIC GAME COMBAT	Page 3
7.1 General Combat Rules.....	Page 3
7.2 Air Defense Combats.....	Page 4
7.3 Maneuver Combats.....	Page 4
7.3.1 Dividing Maneuver Combats.....	Page 4
7.3.2 Occupation of Ground After Maneuver Combats.....	Page 4
7.4 Air Combats.....	Page 4
7.5 Air Support Combats.....	Page 4
8.0 THE BASIC GAME TURN RECORD AND VICTORY DETERMINATION PHASE	Page 4

THE BATTLE MANUAL

THE ADVANCED GAME RULES	Page 7
9.0 GENERAL ADVANCED GAME RULES	Page 7
9.1 Advanced Game Lines of Sight.....	Page 7
9.1.1 Determining Advanced Game Lines of Sight.....	Page 7
9.1.2 Special Blocked Air Defense Lines of Sight.....	Page 7
9.1.3 Special Blocked Air Lines of Sight.....	Page 7
9.2 Organization and Command.....	Page 7
9.2.1 Unit Organization/Types of Headquarters.....	Page 7
9.2.1.1 Organization Symbols.....	Page 7
9.2.1.2 Types of Headquarters Units.....	Page 7
9.2.2 "Commanding" Headquarters.....	Page 7
9.2.2.1 Overall and Subordinate Headquarters.....	Page 7
9.2.2.2 Divisional Headquarters.....	Page 8
9.2.2.3 Brigade/Regiment Headquarters.....	Page 8
9.2.2.4 Assets/Attaching Units.....	Page 8
9.2.2.5 Command Span.....	Page 8
9.2.2.6 Command of Off-Board Units.....	Page 8
9.2.3 Supply.....	Page 8
9.3.1 Types of Supply Units.....	Page 8
9.3.2 Supply Span.....	Page 8
9.3.3 Supply of Off-Board Units.....	Page 8
9.4 Engineers.....	Page 8
9.4.1 Engineers and River Crossings.....	Page 8
9.4.2 Engineers in Urban Combat.....	Page 9
9.5 "Wild Weasels".....	Page 9
9.5.1 Wild Weasel Definition.....	Page 9
9.5.2 ARM Combats.....	Page 9
9.6 Written Notes And Orders.....	Page 9
10.0 THE ADVANCED GAME PREPARATION PHASE	Page 9
10.1 The Advanced Game Disruption Removal Step.....	Page 9
10.1.1 Automatic Command Disruption Removal.....	Page 9
10.1.2 Disruption Removal Rolls.....	Page 9
10.2 The Advanced Game Depletion/Fired Change Step.....	Page 9
10.2.1 Air Defense Recovery From Depletion.....	Page 9
10.2.2 Air Defense Suppression.....	Page 9
10.2.3 Artillery Recovery From Fired.....	Page 9
10.3 The Advanced Game Air Allocation Step.....	Page 10
10.3.1 Direct Air Support Orders ("DAS").....	Page 10
10.3.2 Air Interdiction Orders ("AI").....	Page 10
10.3.3 Suppression of Enemy Air Defense Orders ("SEAD").....	Page 10
10.4 The Advanced Game Ground/Helicopter Check Step.....	Page 10

11.0 ADVANCED GAME COMBAT	Page 10
11.1 Advanced Game Combat Modifiers.....	Page 10
11.2 Advanced Game Air Defense Combats.....	Page 10
11.3 Advanced Game Maneuver Combats/Indirect Fire.....	Page 10
11.3.1 Artillery In Maneuver Combats.....	Page 10
11.3.2 Artillery Indirect Fire.....	Page 10
11.3.3 Artillery After Combat.....	Page 11
11.4 Advanced Game Air Combats.....	Page 11
11.4.1 Radar Homing Missile Air Combats.....	Page 11
11.4.2 "Braced" Air Combat Capabilities.....	Page 11
11.4.3 Voluntary Abort.....	Page 11
11.5 Advanced Game Air Support Combats.....	Page 11
12.0 THE ADVANCED GAME TURN RECORD AND VICTORY DETERMINATION PHASE	Page 11

THE OPTIONAL RULES	Page 12
13.0 REPLACEMENT UNITS	Page 12
14.0 TIME AND WEATHER	Page 12
14.1 The Time and Weather Tables.....	Page 12
14.2 Determining Mapboard Time.....	Page 12
14.3 Determining Mapboard Weather.....	Page 12
14.4 Effects of Time and Weather.....	Page 12
14.4.1 Daylight.....	Page 12
14.4.2 Night.....	Page 12
14.4.3 Fog.....	Page 12
14.4.4 Clouds.....	Page 12
14.4.5 Time and Weather Combinations.....	Page 13
15.0 THE ELECTRONIC BATTLEFIELD	Page 13
15.1 Ground "EC".....	Page 13
15.2 Air "EC".....	Page 13
15.2.1 Defining "EC" Air Units.....	Page 13
15.2.2 Effects of "EC" Air Units.....	Page 13
15.2.2.1 Air "EC" Effects on Enemy Air Units.....	Page 13
15.2.2.2 Air "EC" Effects on Enemy Ground Units.....	Page 13
15.2.2.2.1 Standoff Jamming ("SOJ").....	Page 13
15.2.2.2.2 Close-in Jamming ("CIJ").....	Page 13
15.2.2.2.3 Jamming Combinations.....	Page 13
15.2.2.2.4 Lasting Jamming Effects.....	Page 13
16.0 "NBC" WARFARE	Page 13
16.1 Tactical Nuclear Weapons.....	Page 13
16.2 Biological and Chemical Weapons.....	Page 14
16.3 NBC Delivery Systems.....	Page 14
16.4 NATO NBC Restrictions.....	Page 14
17.0 AIRMOBILE/AIRBORNE FORCES	Page 14
17.1 Optional Paratrooper Unit Sides.....	Page 14
17.2 Using Paratrooper/Air Units.....	Page 14
17.3 Using Paratrooper/Helicopter ("Airmobile") Units.....	Page 15
17.4 Special Leg Movement Rules.....	Page 15
17.5 Using Soviet Motorized Paratrooper Units.....	Page 15
18.0 ENGINEER OPTIONS	Page 15
18.1 Performing Optional Engineer Tasks.....	Page 15
18.2 Effects of Minefields.....	Page 15
18.3 Effects of Obstructions.....	Page 15
19.0 MOVEMENT OPTIONS	Page 15
19.1 Shifting Initiative.....	Page 15
19.2 Extra Ground Movement.....	Page 15
19.3 Ground And Helicopter Strategic Movement.....	Page 15
20.0 COMBAT OPTIONS	Page 16
20.1 Written Air Interdiction Flight Plans.....	Page 16
20.2 Bombing Bridges.....	Page 16
20.3 Joint Air Attack Tactics.....	Page 16
20.4 Integral Air Defense.....	Page 16
20.5 Identification Friend or Foe ("IFF").....	Page 16
20.5.1 Aircraft Proximity Preventing Combat.....	Page 16
20.5.2 Airspace Control Planning.....	Page 16
20.6 Optional Aircraft.....	Page 17
20.6.1 The Tornado ECR.....	Page 17
20.6.2 PACT Wild Weasels.....	Page 17
20.7 Standoff Weapons.....	Page 17
20.8 Long-Range ATGM.....	Page 17
20.9 Air And Artillery Delivered Minefields.....	Page 17
21.0 AIR RECONNAISSANCE	Page 17
22.0 MULTI-PLAYER RULES	Page 18
23.0 THE UMPIRED GAME	Page 18
24.0 PLAYING SOLITAIRE	Page 19
GAME INFORMATION	Page 20
General Hints On Play.....	Page 20
Designer Profile.....	Page 20
THE SCENARIOS	Page 21
25.0 SCENARIO FORMAT	Page 21
26.0 INTRODUCTORY SCENARIOS	Page 21
27.0 TOURNAMENT SCENARIOS	Page 23
28.0 MASTER SCENARIOS	Page 25
GROUND/HELICOPTER UNIT SYMBOLS	Page 28

BASIC GAME RULES

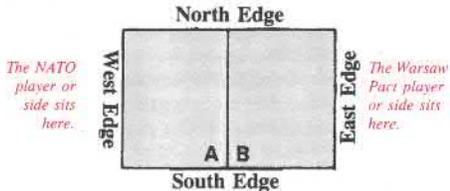
GAME INTRODUCTION: *TAC AIR* ("Tactical AIRpower") simulates the integration of tactical airpower with ground forces in modern combined arms air-land battles. The playing pieces represent military units which the players use to conduct operations. The rules are presented in sections to be learned one at a time—*first* the Basic Game in this folder, *then* the Advanced Game and Optional Rules (in that order) in the **BATTLE MANUAL**. Commonly needed information is given on the units and cards. While reading the rules, when reference is made to something on the units or cards, familiarize yourself with the information's location and uses while reading the rule. Games can and *should* be played using *only* the Basic Game Rules to master the game's mechanics before moving on to higher levels of the game.

Scale: A hexagon represents approximately one nautical mile, a Turn represents about three hours and terrain level elevations represent about 400–700 feet difference between levels. Most ground units represent battalions (some are smaller), and air units represent 2–4 aircraft.

1.0 GAME COMPONENTS

Please inspect the game components while reading this section. Anything with an asterisk (*) is *not needed* for Basic Game play, but is explained in later rules sections in the **BATTLE MANUAL**.

1.1 THE MAPBOARD: The mapboard depicts the VII Corps area in the Federal Republic of Germany (West Germany). A hexagon grid regulates the movement and positioning of the playing pieces. Individual hexagons ("hexes") have identifying letter/number codes and also contain white "sighting dots". Terrain (identified in the **TERRAIN CHART** on the mapboard) is adapted to conform to the hex grid. The compass roses show mapboard orientation. Portions of the German Democratic Republic (East Germany) appear on the mapboard and gray lines show the borders. The mapboard has two separate sections, labeled "A" and "B", which, when both are used (many scenarios use only one mapboard section), should be placed together so the partial hexes match up, with the panel letters oriented as follows:



If only one mapboard section is used, the partial hexes where it joins the other section are out of play and not used.

1.2 THE PLAYING PIECES: The die-cut counters are punched out to provide playing pieces called "units" or "markers":

1.2.1 UNITS: The units represent military formations and contain information identifying their nationalities, identities and combat capabilities. See the **SAMPLE UNIT** and associated information on the Game Card for explanations.

1.2.2 MARKERS: Markers are used to display and record game information. See the **SAMPLE MARKERS** on the Game Card.

1.3 DIE: Two six-sided dice are included.

1.4 GAME CARDS: The two *identical* copies of this card contain the most frequently used and needed game information and charts.

1.5 PLAYER CARDS: The two *identical* copies of this card contain a **TERRAIN EFFECTS CHART** and various **TRACKS** on one side and combat examples on the other.

1.6 ORGANIZATION CARDS *: The **PACT** and **NATO** Organization Cards show how their unit counters are organized.

1.7 THE BASIC GAME RULES FOLDER: This folder contains the rules required to play the Basic Game version of *TAC AIR*.

1.8 THE BATTLE MANUAL *: The booklet contains the information needed to play the more detailed versions of the game.

1.9 OTHER: Not included, but needed for play are pencils and scratch paper for each side.

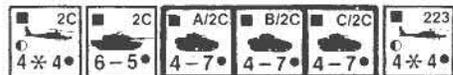
2.0 BASIC GAME SETUP AND PREPARATION FOR PLAY

This "Basic Game Scenario" can be played using only the Basic Game Rules. Additional scenarios that can be played using only the Basic Game Rules can be found in 26.0, but this scenario should be played first as an introduction to the game.

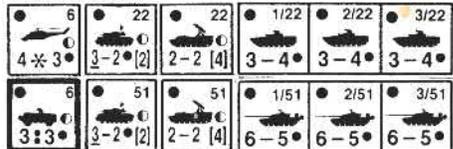
2.1 STEP ONE—GENERAL SETUP: Decide, in any agreeable manner, who will be the **NATO** and **PACT** sides. Then, open mapboard section "A" on a smooth surface between the opposing sides. A Player and a Game Card are taken by each side and placed in convenient locations. Place the turn marker in the "1" box of the **TURN TRACK** on the **NATO** Player Card and the air round marker in the "1" box of the **AIR ROUND TRACK** on the **PACT** Player Card.

2.2 STEP TWO—UNIT SETUP:

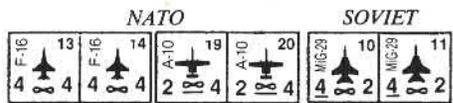
2.2.1 NATO UNIT SETUP: The **NATO** side sets up these **NATO** units first, placing them in any desired and allowable (under game rules) manner in or within 9 hexes of hex Q15, except not in any hexes that are in East Germany.



2.2.2 PACT UNIT SETUP: The **PACT** side sets up *after* the **NATO** side has finished, placing the following **Soviet** units in any desired and allowable (under game rules) manner in or within 4 hexes of hex L3, except that all hexes used *must* be in East Germany.



2.2.3 AIR UNITS: In addition, simultaneously place these air units in the "Ready" boxes of the **AIR UNIT READINESS TRACKS** on the respective Player Cards. **NATO** air units may enter and exit the mapboard from the south and/or west mapboard edges and **PACT** air units enter and exit the mapboard from the north mapboard edge (see the 1.1 diagram for mapboard edges).



2.3 BASIC GAME LENGTH AND VICTORY CONDITIONS: The **PACT** side is the "first" side (see 4.1.3) in this scenario, which lasts five Turns. At the end of five Turns the side which has units in and/or was the last to occupy or move through the *most* Dreiseckseckigdorf hexes (P15, Q15 and Q16) is the winner. **NOTE:** At the start of the game the **NATO** player is considered to be the last side to have moved through all Dreiseckseckigdorf hexes.

3.0 BASIC GAME SEQUENCE OF PLAY

A game starts when all preparation is completed and is played in "Turns." Each Turn is divided into "phases" and phases may be further divided into "steps", all of which must be performed in the *exact* order listed below:

3.1 THE PREPARATION PHASE: All steps 3.1 through 3.3 are all performed in order by the first side, then by the second side.

3.1.1 THE DISRUPTION REMOVAL STEP: Disruption removal is attempted for all disrupted units (see 5.1).

3.1.2 THE DEPLETION/FIRED CHANGE STEP: Flip air defense units to their moving sides (see 5.2).

3.1.3 THE AIR ALLOCATION STEP: Air units are moved in their **AIR UNIT PLAY AID TRACKS** and allocated missions (see 5.3).

3.1.4 THE GROUND/HELICOPTER CHECK STEP: All ground (other than air defense) and helicopter units are flipped as required before each side's own Maneuver Phase (see 5.4).

3.2 THE MANEUVER PHASE: The first side's ground and helicopter units are moved, then all resulting combats resolved. This procedure is then repeated by the second side (see 6.0 and 7.0).

3.3 THE AIR PHASE: The Air Phase consists of ten identical "Air Rounds". During *each* Air Round, the first side moves every one of its air units on the mapboard and resolves any combats caused by this movement followed by the second side doing the same with its air units (see 6.0 and 7.0).

3.4 THE TURN RECORD AND VICTORY DETERMINATION PHASE: The end of a Turn is recorded. At the end of the scenario (fifth Turn in the Basic Game Scenario), a victor is determined (see 2.3 and 8.0).

4.0 GENERAL BASIC GAME RULES

These rules apply during more than one phase/step during a Turn.

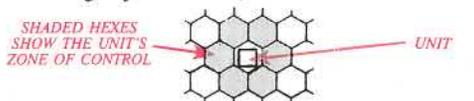
4.1 PLAYER/SIDE DEFINITIONS:

4.1.1 CONTROLLING PLAYER/ENEMY: A player *always* moves the units of his side and is, therefore, the "controlling player" for his own (called "friendly") units and mapboard territory. Whenever the rules refer to units being moved, marked, or having dice rolled for them, this means that their controlling player is the one doing it, unless otherwise stated. What a side does not control or what the other side controls is defined as "enemy."

4.1.2 PHASING/NON-PHASING SIDE: The "phasing side or player" is the one currently performing its side's phases or steps. At this time, the other side is the "non-phasing side or player".

4.1.3 FIRST SIDE/SECOND SIDE: This is defined in every scenario (see 2.3 for the Basic Game Scenario) and determines the order in which phases and steps are performed during a Turn—the side performing first during a Turn being the "first side" and their opponent being the "second side".

4.2 ZONES OF CONTROL: A ground or helicopter unit whose up side shows a zone of control dot, has a "zone of control". These represent a degree of influence in adjacent hexes. The effects of zones of control are explained throughout the rules (see especially 4.8, 6.4.5, 6.5.4 and 7.3.1.2–3). A unit's zone of control is all six surrounding adjacent hexes, as shown below:



4.2.1: Zones of control extend into all types of terrain hexes and over all types of hexsides and are never affected by the presence of other units, friendly or enemy. Air units do not have and can ignore zones of control.

4.2.2: Ground and helicopter units without a zone of control dot (or which lose their zone) control only the hex that they actually occupy.

4.3 STACKING UNITS: When movement is completed, there may be no more than a maximum of one ground or helicopter unit and/or more than two air units located together in the same hex.

4.3.1 MOVEMENT THROUGH OTHER UNITS: Any number of friendly units may pass through the same hex, even though this causes temporary violations of stacking limits. Ground and helicopter units may never enter or pass through a hex containing an enemy ground or helicopter unit. Air units may enter (and stay) or pass through the same hex as friendly or enemy ground or helicopter units and may pass through (but not stay in) the same hex as enemy air units. Ground units may enter (and stay) or pass through a hex containing friendly or enemy air units.

4.3.2 PERMANENT AIR UNIT STACKING—ESCORTS: Friendly air units may pass through a hex containing other friendly air units without stacking or, if desired, the forming of a stack may be announced. Friendly air units ending movement in the same hex must be stacked together.

4.3.2.1: Stacked air units must face in the same direction.

4.3.2.2: Once stacked, air units must remain stacked until one unit is eliminated or they exit the mapboard.

4.3.2.3: Slow air (∞ movement type) units may never be stacked with other air (∞ movement type) units.

4.3.2.4: If one unit in a stack has a close air support and the other an air control mission, the air control mission unit is called an "escort".

4.4 MAP ELEVATIONS: This rule is not in use.

4.5 BASIC GAME LINES OF SIGHT:

This rule is not in use.

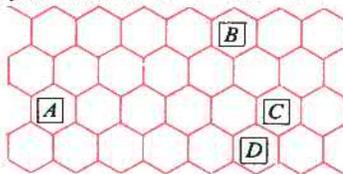
4.6 AIR UNIT FACING: Only air units have "facing"—there is a "front" (the direction it points and moves) and a "rear" (see the SAMPLE AIR UNIT on the Game Card).

4.7 ENTERING AND EXITING THE MAPBOARD: Air units enter and exit the mapboard during Air Phases and other units may also do so during Maneuver Phases, the mapboard edge(s), portions of edges or exact hexes to be used being designated in the scenario. Units always enter and exit at "edge hexes"—full hexes located directly on a mapboard edge.

4.7.1 ENTERING THE MAPBOARD: Any number of off-board units may be considered to be located just off an edge hex. Enter edge hexes at normal movement costs as the first hex of movement and continue movement from there. Entering air units (which may enter during any desired Air Round) face in any desired direction and entering ground units must show their moving sides.

4.7.2 EXITING THE MAPBOARD: To exit the mapboard, a unit must be in an appropriate edge hex and (for air units only) facing their front (see 4.6) off the mapboard. One movement point is then expended to remove the unit from the mapboard. Air units that exit from a designated exit edge are placed in the "Recovery" box of its side's AIR UNIT READINESS TRACK on the Player Card and are eligible to re-enter the mapboard on later Turns after completing procedures on this track (see 5.3). Other units exiting from a designated exit edge (required in some scenarios) are set aside and cannot re-enter. Units that exit from undesignated exit edges are out of the game and cannot re-enter, although they are not considered to be eliminated or counted for victory determination.

4.8 RANGES AND SPANS *: "Ranges" or "spans" are the maximum distance in hexes from a unit at which it may affect other units. Ranges and spans are determined by following a route in hexes from the unit to another hex, not including the hex that contains the unit. Ranges may be traced through enemy units and zones of control and must always follow the shortest possible route, while spans may not be traced through enemy units and zones of control and do not always follow the shortest route (see Advanced Game Rules 9.2.2.5 and 9.3.2). For example, unit "A" is (range) five hexes from units "B", "C" and "D":



5.0 THE BASIC GAME PREPARATION PHASE

Steps 5.1 through 5.3 in this phase are all performed in order by the first side, then all performed in order by the second side. Step 5.4 is separate and is performed just before a side performs its portion of a Maneuver Phase.

5.1 THE DISRUPTION REMOVAL STEP: All units marked with any number of disruption levels are called "disrupted". During this step, the disruption levels on ground and helicopter units may be reduced (mark by flipping or substituting disruption markers displaying the new numbers). Disruption markers on air units are not removed during this step. Roll the die once per disrupted unit. For each roll, consult the DISRUPTION REMOVAL TABLE on the Game Card. If successful, one disruption level is removed, otherwise there is no change. For example, for a unit with "2" disruption levels marked, a roll of "1" or "2" will successfully remove one disruption level (flip the disruption marker from its "2" to its "1" side).

5.2 THE DEPLETION CHANGE STEP: All air defense units with their "D" (non-moving) sides showing which have less than 2 disruption levels marked are flipped over to their other (moving) sides.

5.3 THE AIR ALLOCATION STEP: Perform this step in the AIR UNIT READINESS TRACKS on the Player Cards in the following order:

5.3.1 ADVANCE AIR UNITS: Advance all air units in the "Refuel/Rearm" box into the

"Ready" box, then advance all air units in the "Recovery" box into the "Refuel/Rearm" box.

5.3.2 COMBINE AIR UNITS: After advancing the air units, all boxes containing two half-flight air units of the same type (both F-15s, both F-111s, etc.) in the same box must be combined into one full unit by removing their disruption markers and eliminating one of the air units.

5.3.3 ALLOCATE AIR MISSIONS: Finally, any desired unhit (half-flight units may never be advanced into a "Mission Box") air units in the "Ready" box may be advanced to the "Mission Boxes" ("Air Control" or "Close Air Support") to show their missions during the Turn's upcoming Air Phase. Slow air (∞ movement type) units may only be advanced into the "Close Air Support" box, but other air units may be advanced into either.

5.4 THE GROUND/HELICOPTER CHECK STEP: This is performed by a side just before performing its Maneuver Phase. If not already, ground (except for air defense units) and helicopter units with 3-4 disruption levels must be flipped to their non-moving sides. Other ground and helicopter units may be flipped to show either side, as desired. Air defense units must be left as they are during this step (they were already flipped during the Depletion Change Step—see 5.2).

6.0 GAME MOVEMENT

Ground and helicopter units are moved only during the Maneuver Phase and air units are moved only during the Air Rounds of the Air Phase. The dice have nothing to do with movement.

6.1 GENERAL RULES OF MOVEMENT: A unit or stack is moved by the controlling side using it to trace a continuous route through the hex grid, moving in any desired and allowable direction or directions, and calling out the movement points expended as each hex is entered. Hexes may not be skipped.

6.2 NUMBER OF UNITS TO MOVE: During their part of a Maneuver Phase, the phasing side moves as many or as few eligible ground and/or helicopter units as desired; all, some or none. All air units with missions must be moved every Air Round that they are on the mapboard.

6.2.1: Only ground and helicopter units showing their moving sides and with less than two disruption levels marked may be moved. While phasing units are being moved, no non-phasing units may be moved. The non-phasing player observes to ensure legality and to watch for possible air defense combats (see 7.2).

6.2.2: Units may be moved in any desired order. Once moved and the hand removed, a unit's movement is complete and may not be changed during that Maneuver Phase or Air Round.

6.2.3: Units are normally moved individually, but stacked air units are always moved together (see 4.3.2).

6.3 MOVEMENT POINTS: Each unit has a number of "movement points" available depending on its movement type symbol.

6.3.1: These movement points are listed in the MOVEMENT TYPES CHART printed on the Player Card with each movement type symbol. Movement points indicate the maximum amount of movement available to a unit each Maneuver Phase (ground/helicopter units) or Air Round (air units). This cannot be exceeded (EXCEPTIONS: see 6.5.1 and options 19.2—3). For example, any tracked unit ("—") has six movement points available per Maneuver Phase and any wheeled unit ("·") has four movement points available per Maneuver Phase. Unused movement points can not be accumulated from Turn to Turn or transferred to other units.

6.3.2: Units showing a movement type symbol of “/” have no movement points available (this is a unit’s non-moving side) and may not be moved.

6.4 MOVEMENT COSTS: The movement point cost to enter a hex depends on the hex’s terrain, the hexside crossed, possible enemy zones of control and the unit’s movement type. These costs are found on the Player Cards’ “Movement Cost To Enter/Cross” column of the TERRAIN EFFECTS CHARTS.

6.4.1 HEX TERRAIN MOVEMENT COSTS: The cost to enter a hex depends on the movement type and the terrain. *For example, a tracked unit expends 3 movement points to enter a rough hex while a helicopter unit expends only 1 movement point to enter a rough hex.*

6.4.2 GROUND UNITS CROSSING HEX-SIDES: With these exceptions for ground units *only, there are no extra costs to cross hexsides:*

6.4.2.1 MOVING TO HIGHER

ELEVATIONS: This rule is not in effect.

6.4.2.2 RIVER HEXSIDE MOVEMENT: A unit may only cross a river hexside at bridges, or by using a friendly engineering unit as a bridge.

6.4.3 ROAD/URBAN MOVEMENT: When a unit enters a hex through a hexside connected by a road, any other terrain in the hex and any elevation differences between the hexes can be ignored for movement—just use the movement point costs listed for “road”. Consider all adjacent urban hexes to be joined by roads.

6.4.4 FLIPPING UNITS: It costs one movement point to “flip” a ground or helicopter unit from one side to the other during a *Maneuver Phase (but not during Preparation Phase steps)*. For most units this can be done as desired, but it *must* be done for units whose movement type symbol is colored pink. These *must* be flipped to their non-moving sides (to show that they can not be moved and attack for combat during the same Turn) after movement.

6.4.5 MOVEMENT IN ENEMY ZONES OF CONTROL: It costs an *additional* movement point for a ground or helicopter unit to be moved into *or* from an enemy zone of control hex. Thus, moving from an enemy zone of control hex *and also* into an enemy zone of control hex (of the same or of another enemy unit) costs *two* extra movement points. It also costs one *additional* movement point to flip a ground or helicopter unit during a Maneuver Phase when located in an enemy zone of control hex.

6.5 MOVEMENT RESTRICTIONS: The following are special rules concerning movement:

6.5.1 MINIMUM GROUND AND HELICOPTER MOVEMENT: Regardless of cumulative movement costs, any *ground* unit that can be moved (moving side up and less than 3 disruption levels marked) may be moved at least one hex per Maneuver Phase, if desired. Ground and helicopter units may expend from none through all of their movement points per Maneuver Phase.

6.5.2 LAKE MOVEMENT: Ground units may not enter lake hexes. Helicopter units may pass through, but may not end movement in lake hexes (a helicopter unit with two or more disruption levels in a lake hex is eliminated). Lake hexes have no movement restrictions for air units.

6.5.3 SPECIAL AIR UNIT MOVEMENT RULES: There are a number of special rules that

apply to moving air units:

6.5.3.1 AIR UNIT SIDES: Air unit sides show the exact type of aircraft and its information on one side, while the other shows only a generalized formation symbol. Air units should display their information sides only when in combat or aborting a mission; otherwise (including while in off-board boxes), show only formation sides to the opposition.

6.5.3.2 AIR UNIT MOVEMENT DIRECTION AND TURNING: Moving air units may enter only the hex where their front (see 4.6) points. An air unit may be turned up to one hexside (to right or left) per hex entered, with the exception of slow (≅ movement type) air units, which can be turned any desired number of hexsides per hex entered. No turns are allowed in the hex in which an air unit starts an Air Round (although it could have been turned there when the hex was entered during the previous Air Round).

6.5.3.3 AIR PHASES, ROUNDS AND MIS-SIONS: Air units enter the mapboard and are moved only during the ten Air Rounds of the Air Phase. Air units with missions (moved to the “Mission Boxes” during the Air Allocation Step—see 5.3.3) enter the mapboard and perform their chosen missions during the Air Phase. Other air units remain in their AIR UNIT READINESS TRACK boxes.

6.5.3.3.1: For reference, the players should secretly make written notes of each air unit’s general mission (“AC”=air combat or “CAS”=close air support), based on the “Mission Box” which it occupies *before* entering the mapboard.

6.5.3.3.2: Air units may be, as desired, entered onto the mapboard during *any* Air Round, but must be exited by the end of the tenth Air Round. Air units not exited by the end of an Air Phase are removed from play for the rest of the game.

6.5.3.4 RECORDING AIR ROUNDS: After both sides have completed all movement and combat in an Air Round, the air round marker is advanced one box in the AIR ROUND TRACK on the PACT’s Player Card and the next Air Round begins.

6.5.3.5 MINIMUM AIR MOVEMENT: Even if there are no plans to use it, *every* air unit advanced to a “Mission Box” during the Air Allocation Step must be entered onto the mapboard at some time during the Air Phase, even if just for one Air Round.

The minimum movement for air units is half of their normal movement.

6.5.3.5.1: When air units form a stack (see 4.3.2) on the mapboard, the new stack is moved only as far as the number of movement points remaining to whichever air unit has the *fewest* left at the time the stack is formed.

6.5.3.5.2: Air units do not have to expend all of their movement points when they exit the mapboard.

6.5.4 SPECIAL ARTILLERY AND AIR DEFENSE MOVEMENT RULES: Artillery and Air Defense units moved into an enemy zone of control (this does *not* apply if they start in such a hex or an enemy unit moves adjacent to them) *must* be flipped (and pay the movement costs) to their non-moving sides when they do so.

7.0 BASIC GAME COMBAT

Combat occurs throughout a Turn: air defense combats between air defense and helicopter units during Maneuver Phases and between air defense and air units during Air Rounds; maneuver combats between ground and/or helicopter units at the ends of Maneuver Phases; air combats between air units during Air Rounds; and air support combats between air and ground/helicopter units dur-

ing Air Rounds. Since many of these combats take place *during* movement, players may wish to make notes of movement points expended prior to a combat for reference on remaining movement points after a combat is resolved. Alternately, use a blank unit to record a unit’s starting hex until its movement is complete. For clarification, study the combat examples printed on the back of the Player Card after reading this section.

7.1 GENERAL COMBAT RULES: Combat represents battles between opposing units.

7.1.1 ATTACKERS AND DEFENDERS: In combat, the phasing side’s units are *usually* the “attackers” and the non-phasing side’s units the “defenders” (Basic Game EXCEPTION: see 7.2.3). Units whose combat factor used for a combat is “0” may not be used as attackers, even if modifiers would increase their value to “1” or more, and aborted units may never be used as attackers in any combats.

7.1.2 THE COMBAT CHART/MODIFIERS: On the COMBAT CHART on the Game Card, find the “Type Combat” line that describes a combat. The “Combat Factor To Use” columns on a line show the combat factors (“A” or “B”) to use and the modifiers (to be cumulatively added and/or subtracted from the *each* unit’s combat factors) that apply. *Only* those modifiers in the body of the COMBAT CHART and those covered by note “a” there (=the “Terrain Combat Modifiers” column, explained in the TERRAIN EFFECTS CHART on the Player Card—notes with a “BG” reference apply to the Basic Game) are used in the Basic Game. The “Combat Results Table To Use” column on a line shows which COMBAT RESULTS TABLE (ONE, TWO or THREE) to use to resolve a combat.

7.1.3 COMBAT DIFFERENTIAL: A unit’s combat factor can never be divided to use part in one combat and part in another. All combat factors on a side in a single combat are added together for that combat. In all combats, the defender’s *modified* total combat factors are subtracted from the attacker’s *modified* total combat factors to find the difference, or “combat differential”.

7.1.4 COMBAT RESOLUTION: After using the COMBAT CHART, consult the proper COMBAT RESULTS TABLE on the Game Card. The attacker rolls a die and crossgrids the roll with the appropriate combat differential column to find the results of the combat.

7.1.5 COMBAT RESULTS: The combat results and their effects are summarized in the COMBAT RESULTS TABLES and also covered here:

7.1.5.1 DISRUPTION: Disruption simulates equipment losses, morale losses, being pinned, etc. The controlling player decides where to assign disruption, if there is a choice between units.

The effects of taking disruption are cumulative:

D1: -1 Attack and Defense for all combats

D2: Units cannot make any attacks, but may defend.

D3: Unit loses its Zone of Control.

Air Defense and Artillery cannot attack.

D4: Unit cannot move, except to retreat.

D5: Unit is destroyed, and removed from the game.

If a regiment or brigade loses all of its combat units (excluding air defense units), that unit is considered ‘routed’ and then removes all of its remaining units from the board at the end of the current turn.

7.1.5.2: Air units that have a half flight damage have each of their factors reduced by half, rounded down, to a minimum value of 1. The controlling player selects which air unit is marked with damage in the case of a unit stack.

a side's portion of a Maneuver Phase.

7.3.1.2: Every non-phasing unit with one or more phasing units in its zone of control *must* be engaged in maneuver combat if *any* of its adjacent phasing units can be used to attack.

7.3.1.3 A non-phasing unit must be in a phasing unit's zone of control and the phasing unit must be able to attack in order to do so. The phasing unit must have an A factor >0, and have 0-1 disruptions.

7.3.1.4: An attacking unit may be used to attack a defending unit that has no zone of control, but this is not required.

7.3.1.5: It is possible for one attacking unit to combat more than one defending unit or for multiple attacking units to combat one defending unit. There can never be a single maneuver combat with more than one unit on *both* sides. All combats must be divided up in such a manner that in each separate combat there is at least one side with only one unit. Combat factors (complete with all modifiers) for a side in a single combat are added together whenever there is more than one unit on the same side.

7.3.2 COMBAT RETREATS: A defender that takes at least 1 disruption in a maneuver combat (not air support combat) may retreat one hex instead of taking 1 disruption level. The retreat must be in the direction of that sides entry/exit side, and away from the enemy attacking units. A unit with its non-moving side up cannot retreat.

7.3.3 OCCUPATION OF GROUND: If an enemy unit vacates a hex (either by retreat or elimination), any other friendly unit that participated in the combat may immediately move into the vacated hex.

7.4 AIR COMBATS: "Air combats" are between air units. They may be resolved during or at the end of an air unit's movement during an Air Round, but an air unit must enter at least one new hex during an Air Round before attacking. As a phasing air unit(s) is moved into a hex adjacent to a hex containing a non-phasing air unit(s), an air combat *may* (if allowed and if the phasing player desires) be resolved.

7.4.1: The phasing units are the attackers and the non-phasing units are the defenders. To have an air combat, the attacker must have an air unit or *entire* stack with an "air control" mission which is not following abort procedures (see 7.1.5.3) and whose front faces (see 4.6) the defender's hex. Other air units (including escorts—see 4.3.2.4) may *not* attack for air combat, even if moved into an air combat attacker position.

7.4.2: An air unit with an air control mission may *attack* for air combat only *once* during an Air Phase. *Any* air units may *defend* in any number of air combats and be attacked any number of times during the same Air Round. Once an air unit attacks (but not if it defends) in an air combat, it is treated the same as an air unit that aborts (see 7.1.5.3), and follows those procedures until it exits the mapboard.

7.4.3: Movement is suspended until an air combat is resolved and can be resumed (if any is left) after resolution. Movement can be suspended before *or* after turning in a hex.

7.4.4: Air combats are resolved using the COMBAT CHART and COMBAT RESULTS TABLE TWO on the Game Card. In stacks, both air units' combat factors are added together for a combat. *Each* attacker gets an automatic "+1" modifier for "attacking" (see the body of the COMBAT CHART). The defender's combat factor is different if the defender has an air control ("AC"="A" factor) or close air support ("CAS"="B" factor) mission—for a defending stack with an escort, combine the "B" factor for the close air support mission unit and the "A" factor for the escort unit.

7.5 AIR SUPPORT COMBATS: "Air support combats" are those using air units against ground or helicopter units. They may be resolved during or at the end of an air unit's movement during an Air Round. When a phasing air unit(s) is moved into the *same* hex as an enemy ground or helicopter unit, an air support combat *may*, if desired by the phasing side, be resolved.

7.5.1: Phasing air units are the attackers and a non-phasing ground or helicopter unit is the defender. The attacker must be in the same hex as the defender. Air units with a close air support mission may be used to attack any ground or helicopter units. Air units with an air control mission may attack for an air support combat *only* against helicopter units with their *moving* sides up—if these units move into an air support combat position against other units, they may not attack them.

7.5.2 DIRECT AIR SUPPORT ("DAS") TARGETS: See rule 10.3.1 to determine eligible targets for CAS missions.

7.5.3: An air unit may participate in only one air support combat per Air Phase. Once done, it is treated the same as an air unit that aborts (see 7.1.5.3) and follows abort procedures.

7.5.4: Movement is suspended until the combat is resolved and then resumed after the combat is resolved.

7.5.5: Air support combats are resolved normally, using the COMBAT CHART and COMBAT RESULTS TABLE ONE on the Game Card. River hexsides and elevation differences do not modify defenders in air support combats. In stacks, both air unit's combat factors are combined together for a combat. Note that *each* attacker with an air control mission gets an automatic "+1" modifier when in combat with a moving helicopter unit (see the body of the COMBAT CHART). If a stack containing an escort is used to attack a ground or non-moving helicopter unit, *only* the close air support mission air unit is used for the combat, although this counts as the one allowable air support combat for both air units in the stack (ie., *both* must follow abort procedures after the combat). If a stack containing an escort is used to attack a moving helicopter unit, the escort's "A" factor "+1" is added to the close air support unit's "B" factor for the combat. Ignore any combat results adverse to air units in air support combats.

7.5.6: The same ground or helicopter unit may be attacked repeatedly by different air units during the same or different Air Rounds.

7.5.7: If a defender is eliminated, *any* adjacent enemy ground or helicopter unit that can be moved may immediately enter the eliminated unit's hex.

8.0 THE BASIC GAME TURN RECORD AND VICTORY DETERMINATION PHASE

8.1 THE BASIC GAME TURN RECORD STEP: At the end of a Turn, advance the turn marker one box on the TURN TRACK on the NATO Player Card and reset the air round marker in the "1" box on the AIR ROUND TRACK on the PACT Player Card.

8.2 THE BASIC GAME VICTORY DETERMINATION STEP: Perform only at the end of a game. See the scenario's victory conditions and determine a winner.



**The Avalon Hill
Game Company**

Division of Monarch Avalon, Inc.

©1988 The Avalon Hill Game Company • Printed in USA

8720001

B6003 1/88 19539-3

THE ADVANCED GAME RULES

INTRODUCTION TO THE ADVANCED GAME

The Advanced Game Rules introduce new concepts and procedures that are absent in the Basic Game, giving a more complex and detailed game that is much easier to understand and learn if the Basic Game Rules are already well understood. The Advanced Game, in most cases, simply adds to the Basic Game or supplements certain sections. The new units used fall into old categories—i.e., headquarters units are still ground units and the Basic Game rules for ground units also apply to them. The Sequence of Play for the Advanced Game is mainly unchanged from the Basic Game (the Depletion Change Step is now called the Depletion/Fired Change Step). The SEQUENCE OF PLAY WITH ALL OPTIONS (with notes for reference during play) for the Advanced Game and Optional Rules is printed on the Game Card. Simply ignore the Optional Rule ("OR) phases and explanations when only using the Advanced Game Rules. ALL BASIC GAME RULES STILL APPLY UNLESS OTHERWISE STATED.

9.0 GENERAL ADVANCED GAME RULES

As in the Basic Game (see 4.0), these Advanced Game rules apply during more than one phase/step of a Turn and are given separately here to avoid repetition.

9.1 ADVANCED GAME LINES OF SIGHT:

This rule is not in effect.

9.2 ORGANIZATION AND COMMAND:

9.2.1 UNIT ORGANIZATION/TYPES OF HEADQUARTERS: All ground and helicopter units are part of larger "organizations", as shown on the Organization Cards and by the unit's organization symbols.

9.2.1.1 ORGANIZATION SYMBOLS: Organization symbols show the organizations of which a unit is a part. For example, all units of the United States 1st Armored Division have a triangle (▲) organization symbol. The various organization symbol colors show further subdivisions of a major organization. For example, all units in the 1st Brigade of the United States 1st Armored Division have a red triangle organization symbol. Headquarters units use enlarged organization symbols that also serve as their unit symbols, the number of symbols (the more, the higher) indicating its place in the organizational hierarchy. For example, a United States 1st Armored division headquarters unit has two triangles as a unit

symbol while the division's subordinate brigade headquarters have only one triangle each (in varying colors) as unit symbols. Air units do not have organization symbols.

9.2.1.2 TYPES OF HEADQUARTERS UNITS: Headquarters units can be "maneuver headquarters" (black on a national color background), "artillery headquarters" (white on a national color background) or "air defense headquarters" (national color print on a white background). These color contrasts help players locate the types of units these headquarters units normally command and they also have some separate game functions. Air units do not have headquarters.

9.2.2 "COMMANDING" HEADQUARTERS: A "commanding" headquarters is a headquarters unit of any type that can be used to simulate "command control" effects (somebody has to give the orders) on specific subordinate ground and helicopter units. In the hierarchy or "chain-of-command" of headquarters units, most subordinate units have a number of headquarters units that can be used to "command" them. A headquarters unit that does not fall into the chain-of-command hierarchy for a particular subordinate unit cannot serve as a commanding headquarters for that particular unit. For example, a headquarters unit that is part of the PACT 6th Guards Tank Division cannot be a commanding headquarters for a unit that is part of the PACT 51st Tank Division.

9.2.2.1 OVERALL AND SUBORDINATE HEAD-

QUARTERS: An "overall" headquarters unit is one that has no headquarters above it in the chain-of-command hierarchy. The NATO "VII Corps" headquarters unit is at the top of the NATO hierarchy, is the overall NATO headquarters for all NATO ground and helicopter units. The PACT "Central Group of Forces" headquarters unit is at the top of the PACT hierarchy, is the overall PACT headquarters for all PACT ground and helicopter units. Both of these overall headquarters units show three black square organization symbols as their unit symbols. "Subordinate" headquarters units are any that are lower in the command hierarchy than an overall headquarters. If the NATO VII Corps or PACT Central Group of Forces overall headquarters units are not included in a scenario, then the various (there can be more than one) highest-ranking headquarters units that are included can serve as overall headquarters for those scenarios, as follows:

9.2.2.1.1: The various division headquarters units (plus the NATO 69th Air Defense Artillery Group and the PACT 3rd SAM Brigade, which are used identically) can serve as overall headquarters for their division's units and any attached assets.

9.2.2.1.2: The NATO German brigade and the U.S. 2nd Armored Cavalry Regiment and 72nd and 210th Artillery Group headquarters units can serve as overall headquarters for their units and any attached assets.

9.2.2.1.3: NATO Air Defense Artillery and PACT SAM battalion headquarters units can serve as overall headquarters for their battalion's units and any attached assets if their Air Defense Artillery Group or SAM Brigade headquarters units are not included in a scenario.

9.2.2.2 DIVISIONAL HEADQUARTERS:



Most divisional organizations (plus the identically used NATO 69th Air Defense Artillery Group and PACT 3rd SAM Brigade) have one or more divisional headquarters units (showing two of the organization symbols in black as a unit symbol) that are the commanding headquarters for all units in or attached to their divisions. For example, the two divisional headquarters units (NOTE: multiple divisional headquarters units simulate echelons in an organization's real-life command system—in the game all have an equal value) of the PACT 6th Guards Tank Division are commanding headquarters for all units in or attached to the 6th Guards Tank Division (PACT units with circles of any color for organization symbols). Note that the two NATO German divisions do not have divisional headquarters—the German brigades are designed to operate independently, and divisional organization is quite loose.

9.2.2.3 BRIGADE/REGIMENT HEADQUARTERS:



All brigade and regiment organizations (plus the identically used NATO 72nd and 210th Artillery groups, the NATO Air Defense Artillery battalions and the PACT SAM battalions) have one headquarters unit (showing one large organization symbol as a unit symbol in a color other than black) that is a commanding headquarters for all units in or attached to their brigade or regiment. For example, the headquarters unit of the German 36th Panzer Brigade is a commanding headquarters for all units in or attached to the 36th Panzer Brigade (any NATO German units with a blue circle for an organization symbol).

9.2.2.4 ASSETS/ATTACHING UNITS: "Assets"



are units or organizations of units commanded by higher headquarters that may be commanded directly by that higher headquarters or "attached" to any lower headquarters in the chain-of-command. The lower headquarters unit to which an asset unit is attached may then serve as a commanding headquarters for the asset. The organization symbols for separate asset units are always colored black. The "attachment" of asset units does not have to be formally noted—a player just has to show that an appropriate headquarters is available to command an asset unit during a Turn's Preparation Phase.

9.2.2.4.1 Overall Separate Assets: NATO VII Corps "separate" (individual units with black organization symbols) assets can be commanded by the VII Corps headquarters unit or by any NATO maneuver headquarters units. PACT Central Group of Forces separate assets can be commanded by the Central Group of Forces headquarters unit or by any PACT maneuver headquarters units.

9.2.2.4.2 Overall Organized Assets: The NATO U.S. 2nd Armored Cavalry Regiment, 72nd and 210th Artillery groups and German 26th Airborne Brigade are all "organized" parts of the VII Corps' assets (their square organization symbols are not black, but in different colors to show their organizations) and can be commanded directly by the VII Corps headquarters unit or attached as complete organizations to the U.S. 1st Armored or 3rd Mechanized Infantry Divisions and commanded by their own or by the appropriate division's headquarters units.

9.2.2.4.3 Divisional Assets: All divisional assets (plus the identically used assets of the NATO 69th Air Defense Artillery Group and PACT 3rd SAM Brigade) may be commanded directly by a divisional headquarters unit or separately attached and commanded by any subordinate headquarters unit of the same division.

9.2.2.4.4 Attachment Limitations: Any types of asset units may be attached to maneuver headquarters. No asset units may be attached to artillery or air defense headquarters, except in the cases of the asset of the NATO U.S. 69th Air Defense Artillery Group, PACT 3rd SAM Brigade and PACT 10th Artillery Division, which can be attached to subordinate headquarters of their own organizations.

9.2.2.5 COMMAND SPAN: A commanding headquarters unit can "command" any of its subordinate units within its "command span" (distance in hexes). Note that the command span varies on the two sides of some headquarters units. A command span distance may be traced on the mapboard following any desired (no matter how winding or circuitous) route of hexes from the headquarters unit to a subordinate unit. The command path must not pass through any hex containing an enemy ground or helicopter unit, enemy ZOC, or across rivers, lakes, or other terrain that is otherwise impassible. A command path may be traced into but not through an enemy ZOC. Any unit within the command span of one of its commanding headquarters units is defined to be "in command".

9.2.2.6 COMMAND OF OFFBOARD UNITS: Units that can enter the mapboard from off-board are automatically considered to be "in command" on their entry Turn, regardless of commanding headquarters locations.

9.3 SUPPLY: Supply units represent sources of ammunition, fuel, etc. for the other units. Units must have supplies to function at full efficiency.

9.3.1 TYPES OF SUPPLY UNITS: There are three types of supply units and also integral supply:

9.3.1.1 ARTILLERY SUPPLY UNITS: "Artillery supply units" (white on a national color background) are used to supply artillery units to permit their recovery from disruptions and to flip from their "F" side after use in combat. Every artillery unit (except those with integral supply) is organized to have one artillery supply unit specifically assigned to it and to no other artillery unit. On the Organization Cards, each artillery unit is pictured with its own assigned artillery supply unit to its immediate right.

9.3.1.2 AIR DEFENSE SUPPLY UNITS: "Air defense supply units" (national color print on a white background) are used to supply air defense units. Except for air defense units with integral supply, all air defense units require an air defense supply unit to recover from disruption and depletion. Air defense supply units are organized to have one supply unit assigned to a number of air defense units, as shown on the Organization Cards and explained below:

9.3.1.2.1: The air defense supply unit shown as an asset of the PACT 3rd SAM Brigade is the air defense supply unit assigned to all air defense units in that brigade.

9.3.1.2.2: The air defense supply units shown as parts of the PACT SAM regiments and the NATO air defense artillery battalions are the air defense supply units assigned for all air defense units in their specific regiment or battalion.

9.3.1.2.3: The air defense supply unit shown as an asset of the NATO U.S. 69th Air Defense Artillery Group is the air defense supply unit assigned to the air defense unit asset also shown with it and also to all other air defense units that are part of the Group.

9.3.1.3 MANEUVER SUPPLY UNITS: "Maneuver supply units" (black on national color background) are used to supply all ground and helicopter units, except for artillery and air defense units and those

units with integral supply, and are required for these units to recover from disruption. Maneuver supply units are organized to have one or two maneuver supply units assigned to a number of ground and/or helicopter units, as shown on the Organization Cards and explained below:

9.3.1.3.1: With the exception of the PACT 103rd Guards Airborne Division, the maneuver supply unit(s) shown as parts of each regiment or brigade are the maneuver supply units assigned for all non-artillery/air defense units in their specific regiment or brigade only.

9.3.1.3.2: The maneuver supply unit shown as an asset in the PACT 103rd Guards Airborne Division is the maneuver supply unit for all units without integral supply in that division.

9.3.1.4 INTEGRAL SUPPLY: All headquarters and supply units and any other ground or helicopter units with a printed "integral supply" symbol are considered to carry their own supplies. They are always considered to be supplied as needed and have no need for separate supply units.

9.3.2 SUPPLY SPAN: A supply unit of any type can supply any of its assigned units within its "supply span" (distance in hexes). The supply distance may be traced on the mapboard following any desired (no matter how winding or circuitous) route of hexes from the supply unit to the unit requiring supply. The supply route must not pass through an enemy ZOC, an enemy unit, or across rivers, lakes, or other terrain that is otherwise impassible. A supply route may be traced into but not through an enemy zone of control. Any unit within the supply span is defined to be "supplied" or "in supply".

9.3.3 SUPPLY OF OFF-BOARD UNITS: Units that can enter the mapboard from off-board are automatically considered to be "in supply" on their entry Turn, regardless of supply unit locations.

9.4 ENGINEERS Engineers are used (among many other duties) to get combat units over rivers by building bridges and ferries, for blowing up bridges and for planning defenses and helping friendly units "dig in". In TAC AIR, engineer units are normal ground units with special capabilities.

NATO ENGINEERS

Moving Side



Non-Moving Side



PACT ENGINEERS

Moving Side



Non-Moving Side



9.4.1 ENGINEERS AND RIVER CROSSINGS: Engineer expertise and modern bridging equipment makes rapid river crossings possible.

9.4.1.1 ENGINEERS CROSSING RIVERS: An engineer unit ignores the prohibition of crossing an unbridged river hexside.

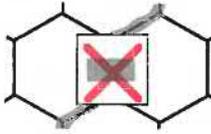
9.4.1.2 ENGINEER ASSISTED RIVER CROSSINGS: The presence of a friendly engineer unit on the same side of a river allows other friendly units to treat the river as having a bridge.

9.4.1.3 BRIDGE DEMOLITION: Engineers may "blow up" a bridge. To do so, have an en-

gineer unit move into or remain in one of the two hexes on either side of a bridge *hexside* and end movement there with its non-moving side up.

9.4.1.3.1: After completing the engineer unit's movement, the controlling side rolls one die to attempt to blow up the bridge. If a "1-5" is rolled, the bridge is blown up for the rest of the game, and if a "6" is rolled, the attempt failed. Modify the die roll by "1" for each disruption level marked on the engineer unit.

9.4.1.3.2: Mark a blown up bridge by placing an obstruction marker over (to cover) the bridge hexside. The hexside is now considered to be an unbridged river hexside.



Blown Up Bridge

9.4.2 ENGINEERS IN URBAN COMBAT:

Engineers can greatly assist the defense of urban areas.

9.4.2.1: The presence of an engineer unit with its non-moving side up in any urban hex doubles its own combat factor and the combat factors of any *adjacent* ground (not helicopter) units also in urban hexes with their non-moving sides up for *defending* (not for attacking) in any types of combats. In these cases, the unit's combat factor is doubled *before* any combat modifiers are added or subtracted. The normal modifier for defending an urban hex is added *after* this doubling.

9.4.2.2: In only the cases covered in 9.4.2.1, during their side's Maneuver Phases, the phasing side may consider that its units in urban hexes have no zones of control (if they would normally have any) and therefore will never be forced to attack adjacent enemy units, unless desired. If a unit does attack, its *full* zone of control is in effect.

9.5 "WILD WEASELS":

9.5.1 WILD WEASEL DEFINITION: The F-4G (NATO air units 7 through 12—each of these actually represents a F-4G flying with a F-16C) is the only currently known fully operational "Wild Weasel" aircraft that is included in the game. Wild Weasels are special-purpose aircraft with specially trained crews that are designed to detect, pinpoint and attack radar air defenses and their command units with special "anti-radiation missiles" (called "ARMS") that passively home on target radars. In the game, to be considered a Wild Weasel, a F-4G air unit must have "SEAD" (see 10.3.3) orders. A F-4G air unit still retains a normal "SEAD" capability (can attack for an air support combat against an air defense or air defense headquarters unit), but it also has special Wild Weasel capabilities for "ARM combats".

9.5.2 ARM COMBATS: A Wild Weasel may perform one "ARM combat" (considered a special type of air support combat) per Air Phase in addition to one normal "SEAD" air support attack. Written notes should be kept as each is made—a Wild Weasel does *not* perform like an aborted air unit after attacking for just one of its combats, only after *both* have been resolved, when in a stack where the other air unit must follow abort procedures, or when actually sustaining an abort combat result. An ARM combat is resolved the same as a normal air support combat except the units in the combat may be up to ten hexes apart. There are two possible types of ARM combats:

9.5.2.1 REACTING ARM COMBATS: During an Air Round, whenever an enemy *radar* air defense unit (one with an underlined "A" factor)

that is within a ten hex range of and in *any* direction from a Wild Weasel air unit is used to announce an air defence combat against any friendly air unit(s) (including against the Wild Weasel air unit itself), the Wild Weasel side may announce one "reacting ARM combat" against that air defense unit (or one combat each against any or all of them, if more than one).

9.5.2.1.1: The Wild Weasel air unit may have already been moved, have yet to be moved, or be in the process of moving. A Wild Weasel air unit does not have to be able to "see" an air defense unit with which it has a reacting ARM combat and an unblocked line of sight is not necessary.

9.5.2.1.2: When making a reacting ARM attack, the Air Defense unit fires first. If the result is "Abort" the WW aircraft may either abort (and not make the ARM attack) or take a half flight damage (and make the ARM attack). All damage is applied only after the ADA and WW have attacked.

9.5.2.2 NORMAL ARM COMBATS: During its portion of an Air Round, a Wild Weasel air unit may have a "normal ARM combat", the same as it could have an air support combat while moving (in fact, both types may be resolved during the same Air Round, although both may not be resolved from the same hex). The difference with a normal ARM combat is that the target may be an enemy *radar* air defense or *any* air defense headquarters unit. The target unit must have its moving side up, be at a range of 10 hexes or less, and be located in a straight row of hexes from the front of the Wild Weasel air unit with an unblocked line of sight. Also, unlike a reacting ARM combat, there is no "+4" modifier for a normal ARM combat.

9.5.2.3 MULTIPLE ARM COMBATS: No ARM combat can be announced where there are two or more air defense and/or air defense headquarters units serving as combined defenders in a single combat. An individual ARM combats must involve only one air defense or air defense headquarters unit as the defender.

9.5.2.3.1: In a stack of Wild weasel air units, each air unit may be used to engage separate air defense units, both may be used together with combined combat factors to engage the same air defense unit, or one could be used and the other not used, as desired by the controlling side.

9.5.2.3.2: Wild Weasel units in different hexes may be used to engage different air defense units that were announced for the same air defense combat. Wild Weasel units in different hexes can not be combined for a single attack on the same air defense unit.

9.6 WRITTEN NOTES AND ORDERS: Playing games using the Advanced Game and Optional Rules can require a considerable amount of note taking and order writing. Except for common knowledge notes made as memory aids, these should all be made *secretly* and revealed to the opponent only on a "need to know" basis to prove that what is being done is legal and is following what was written down earlier. In larger scenarios, some markers may run short and either require additional notes to record their information or the manufacture of some "homemade" markers. Although we regret that such shortages may occur, the decision here, given the finite number of counters, was to include more *units* for a greater variety of play options rather than to include less units and more markers.

10.0 THE ADVANCED GAME PREPARATION PHASE

This steps in this phase are performed as in Basic Game rule 5.0, augmented as follows:

10.1 THE ADVANCED GAME DISRUPTION REMOVAL STEP:

10.1.1 AUTOMATIC COMMAND DISRUPTION REMOVAL: *Before* rolling the die for disruption removal (see 5.1), there is an automatic removal of one disruption level from *all* ground and helicopter units that are adjacent to one or more of their commanding headquarters (including those marked with disruptions) units. **Also, a headquarters unit may automatically remove one of its own disruption levels.**

10.1.2 DISRUPTION REMOVAL ROLLS:

After the automatic command disruption removal, disruption removals can be rolled for as in Basic Game rule 5.1, with these restrictions and changes:

10.1.2.1: In the Advanced Game, in order to roll for disruption removal, a unit must be within the supply span of one or more of its own supply units (of the appropriate types—this includes supply units marked with any number of disruptions) or have integral supply.

10.1.2.2: There is a "+1" modifier to a disruption removal die roll if the unit is located in an enemy zone of control when the die roll is made (this makes recovery from **3+** disruption levels impossible while in an enemy zone of control).

10.2 THE ADVANCED GAME DEPLETION/ FIRED CHANGE STEP:

Artillery *and* air defence units are flipped to their moving sides as air defense units are in the Basic Game (see 5.2) *only* if certain conditions are met:

10.2.1 AIR DEFENSE RECOVERY FROM DEPLETION:

A depleted air defense unit may be flipped to its moving side if it has 3 or less disruption levels, and is within the supply span of its own supply unit.

10.2.2 AIR DEFENSE SUPPRESSION:

If all of an air defense unit's commanding air defense headquarters (printed in national colors with a white background—other types of headquarters do not matter for this rule) are eliminated, disrupted and/or beyond command span, that air defense unit should be marked with a suppressed marker. If all suppressed markers are already in use, make written notes of suppressed air defense units.

10.2.2.1: A suppressed marker shows that an air defense unit is "suppressed" for the entire Turn (see 11.1.4 and the COMBAT CHART's modifier "e" on the Game Card for the combat effects of being suppressed).

10.2.2.2: Air defense units with integral supply do not have air defense headquarters and can never be suppressed in this manner.

10.2.2.3: Air defense units marked suppressed from the previous Turn may have the suppressed markers removed if the suppressed conditions no longer apply.

10.2.3 ARTILLERY RECOVERY FROM FIRED:

A fired artillery unit may be flipped to its moving side if it has 3 or less disruption levels, and is within the supply span of its own supply unit, and the supply unit must have 3 or fewer disruption levels.

10.2.3.1 RESUPPLY FROM OTHER

ARTILLERY SUPPLY: If its own artillery supply unit has been eliminated, a fired artillery unit may be flipped to its moving side if within the supply span of any other friendly artillery supply unit (with 3 or less disruptions), provided that unit has not been used to supply any other artillery unit this turn.

10.2.3.2 RESUPPLY OF HEAVY ARTILLERY:

Artillery units with a circled F are considered heavy artillery units. These require two turns to resupply. When used, the unit is flipped, and a 'Fired' marker is placed on the unit. During the first resupply, remove the 'Fired' marker, but leave the unit flipped. During the second resupply, flip the unit to its moving side.

10.3 THE ADVANCED GAME AIR ALLOCATION STEP: In the Advanced Game, the procedure for air units advanced into the "Air Control" box is unchanged. They may still attack for air support combats only against enemy helicopter units that are adjacent to friendly ground or helicopter units, act as escorts or attack for air combats.

10.3.1 DIRECT AIR SUPPORT ORDERS ("DAS"):

These missions are generally flown close to the front lines to support the combat units close to the enemy. In the "direct air support" type of close air support mission, an air unit must be assigned to a *specific* ground or helicopter unit which will serve as the air unit's "forward air controller" for its air support combat. Only maneuver headquarters, cavalry, reconnaissance and helicopter units (including disrupted ones) may be designated to act as forward air controller units. One unit may serve as the forward air controller unit for any number of air units, but no air unit may be assigned to more than one forward air controller unit (EXCEPTION: when a divisional headquarters is designated as a forward air controller unit, any of that division's divisional headquarters units may be used, as desired).

10.3.1 DIRECT AIR SUPPORT ("DAS"): An air unit with a DAS mission must coordinate fire with a friendly ground unit.

10.3.1.1: A ground recon or cavalry unit (with a green border) or a helicopter unit with its moving side up can be used as a forward air controller for DAS missions. Any enemy unit within 6 hexes of a recon unit may be targeted by DAS aircraft when using these units.

10.3.1.2: An HQ unit may direct DAS missions to any enemy unit that is within 3 hexes.

10.3.1.2: Any other ground unit may direct DAS missions to adjacent enemy units only, but with a -1 penalty.

10.3.2 AIR INTERDICTION ORDERS ("AI"):

These missions are generally flown deep in the enemy's rear to strike enemy supply, command and reserve units. In the "air interdiction" type of close air support mission, an air unit is not assigned to a forward air controller, but must have its target area (any hex selected as "interdiction hex") specified.

10.3.2.1: An air unit with air interdiction orders may be used for air support combats only with

any of the enemy ground or helicopter units that [redacted] are no more than 6 hexes range (halved at night if option 14.0 is used) from the air unit in its "interdiction hex".

10.3.2.2: A written notation for air interdiction orders should include an order notation ("AI"), the air unit's designation and the designation of an interdiction hex. For example, the notation, "AI 14-D10" indicates air interdiction orders for air unit "14" using hex "D10" as the interdiction hex.

10.3.3 SUPPRESSION OF ENEMY AIR DEFENSES ORDERS ("SEAD"):

These missions are flown against enemy air defenses. In the "suppression of enemy air defenses" type of close air support mission, an air unit is not assigned to a forward air controller or limited by an interdiction hex. Instead, it is limited in its choice of targets.

10.3.3.1: An air unit with suppression of enemy air defenses orders may be used for air support combats only against any enemy air defense or air defense headquarters units that can be "seen" [redacted] from the air unit from any hex during its movement.

10.3.3.2: A written notation for suppression of enemy air defenses orders should include an order notation ("SEAD") and the air unit's designation. For example, the notation, "SEAD 7" indicates suppression of enemy air defenses orders for air unit "7".

10.4 THE ADVANCED GAME GROUND/ HELICOPTER CHECK STEP:

As in 5.4, this step is performed by a side just before that side's portion of a Maneuver Phase. All ground (except artillery and air defense, but including all types of supply and headquarters units) and helicopter units are flipped with the following restrictions:

10.4.1 DISRUPTED, UNSUPPLIED, AND OUT OF COMMAND UNITS: A unit must be flipped to its non-moving side if any of the following conditions apply:

10.4.1.1: The unit has 3 or more disruptions.

10.4.1.2: The unit is out of range of its immediate commanding headquarters.

10.4.1.3: The unit is in range of its immediate commanding headquarters, but the HQ unit has 3 or more disruptions.

10.4.1.4: The overall (top-level) headquarters is always considered to be in command.

10.4.1.5: The unit is out of range of its supply unit. Units with integral supply ignore this rule.

10.4.1.6: A unit that is out of supply range has a -2 attack penalty.

10.4.2: If a subordinate headquarters unit is out of command, all lower level units have a -1 penalty to attack and defense values.

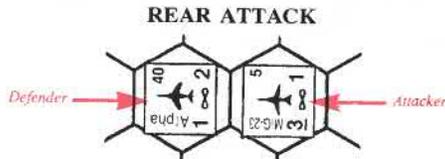
10.4.3: All other units, except for artillery and air defense units, may be flipped to either side as desired.

11.0 ADVANCED GAME COMBAT

11.1 ADVANCED GAME COMBAT MODIFIERS:

All Basic Game modifiers still apply (see 7.1.2) and all modifiers still apply to *each* unit involved and are cumulative. Also see notes "b" through "h" (referenced in parenthesis below) on the COMBAT CHART on the Game Card.

11.1.1 (b): For air combats, the attacker can add "+1" to the "A" factor if the attacking air unit makes a "rear attack" from directly behind in an adjacent hex, as shown below:



11.1.2 (c): For air support combats or maneuver combats involving an attacking helicopter unit, a defending *ground* unit with its moving side up in a road or urban hex has its "B" factor reduced by "-1" and *no* terrain combat modifiers from the TERRAIN EFFECTS CHART apply.

11.1.3 (d): For air defense combats, a gun-armed (has a zone of control dot) air defense unit attacker can add "+1" to its "A" factor if the defender is a helicopter unit.

11.1.4 (e): For air defense combats, an air defense unit attacker has [redacted] its range halved (round fractions up) if it is suppressed (see 10.2.2).

11.1.5 (f): For maneuver combats, each attacking helicopter unit may add "+1" to its "A" factor if there is no defending helicopter unit involved in the combat.

11.1.6 (g): For reacting ARM combats, add "+4" to the attacking Wild Weasel air units "A" factor (also see 9.5.2).

11.2 ADVANCED GAME AIR DEFENSE COMBATS:

Air defense combats are handled exactly as in the Basic Game (see 7.2), although Wild Weasels could turn an air defense combat into a reacting ARM combat [redacted]

11.3 ADVANCED GAME MANEUVER COMBATS/INDIRECT FIRE:

Maneuver combats are handled exactly as in the Basic Game (see 7.3), except that artillery units are now used and "indirect fire" combats are now possible.

ARTILLERY UNIT



11.3.1 ARTILLERY IN MANEUVER COMBATS: Artillery units adjacent to enemy ground and/or helicopter units are used for maneuver combats the same as other ground units.

11.3.2 ARTILLERY INDIRECT FIRE: Artillery units not located in an enemy zone of control, not disrupted and not showing their "F" (non-moving) side are eligible for use in "indirect fire" combats. Indirect fire combats may be employed against any enemy ground or helicopter unit engaged in a maneuver combat that is within an artillery unit's range. Line of sight restrictions do not apply for indirect fire combats (ie., the friendly units in the maneuver combat are "directing" the fire). Indirect fire procedure is as follows:

11.3.2.1 STEP ONE:: The phasing side announces the units to be engaged in an individual maneuver combat.

11.3.2.2 STEP TWO: The phasing side then announces which (if any) of its eligible artillery units will be used for indirect fire against which of the defending units in the maneuver combat.

11.3.2.3 STEP THREE: The non-phasing side may then announce which of its eligible artillery units will be used for indirect fire combat against which of the attacking units in the maneuver combat and/or for "counterbattery" combat (considered a special type of indirect fire combat) against any of the announced indirect firing phasing artillery units. Any of the phasing artillery units engaged by counterbattery combat can *not* be used against their announced defending units, but may only be used for the counterbattery combat.

11.3.2.3.1: More than one artillery unit may be announced for an indirect fire (including counterbattery) combat against a single enemy unit, only if all of the artillery units used against a single unit are within the command span of the *same* commanding artillery or maneuver headquarters unit.

11.3.2.3.2: A single artillery unit may not be announced for an indirect fire combat against more than one enemy unit.

11.3.3: RESOLVE MANEUVER COMBAT:

To resolve combat, add the 'A' factors for all attacking units (for both direct and indirect fire) and all of the 'B' factors for the defending unit, plus any supporting defending artillery. Subtract the total 'B' factors from the total 'A' factors to obtain the combat differential. Use Combat Chart One to determine the result after rolling 1d6.

11.3.3.1: Artillery units engaged in indirect fire ignore adverse results, and cannot be assigned disruptions.

11.3.3.2: Air Defense units may be used in a maneuver combat against an enemy helicopter unit with its moving side up. Air defense units engaged in maneuver combats automatically become Depleted at the end of the maneuver combat.

11.3.4: COUNTERBATTERY COMBAT: Resolve counterbattery combat by adding the total 'A' factors for the counterbattery. Subtract the 'B' factor of the defending artillery to obtain the combat differential. Use Combat Chart One to determine the outcome.

11.3.3 ARTILLERY AFTER COMBAT: After engaging in any indirect fire combat (not after a maneuver combat), an artillery unit is flipped to its "F" (fired or non-moving) side. Heavy Artillery units (with a circled "F") can be used for indirect fire combats a maximum of every other turn. They are flipped and have a fired marker placed on them after use in an indirect fire combat to indicate their extended reload time.

11.4 ADVANCED GAME AIR COMBATS: Air combats are handled exactly as in the Basic Game (see 7.4), except that some air units are capable of "radar homing missile" air combats, some air units require special rules and modifier 11.1.1 (also see "b" on the COMBAT CHART) applies to air combats.

11.4.1 RADAR HOMING MISSILE AIR COMBATS:

11.4.1.1 RADAR HOMING MISSILE

DEFINITIONS: Air units with an underlined "A" factor normally carry long-range radar-homing missiles when assigned an air control mission (not when assigned to close air support missions). These air units, when phasing, are capable of attacking once for a normal air combat *or* attacking once for a radar homing missile air combat.

11.4.1.2 RESOLVING RADAR HOMING MISSILE AIR COMBATS: This special type of air combat is resolved the same as a normal air combat, except that the engaged units are not adjacent. The diagrams found in the RADAR HOMING MISSILE AIR COMBAT section of the Game Card provide the additional information required for these combats.

11.4.1.2.1: The defending air unit(s) must be "seen" (no blocked line of sight) by the attacker(s), must lie in a hex corresponding to one on the "Radar Homing Missile Firing Cone Diagram" in relation to the attacker's front facing and must also be in a hex corresponding to one on the "Radar Homing Missile Air Combat Modifiers Diagram" in relation to the defender's front facing. Note that a defender must be in a hex that corresponds to one on *both* diagrams and an attacker must always be at least 2 hexes range from the target's hex.

11.4.1.2.2: The maximum range at which a radar homing missile air combat is possible depends on the attacker's location in relation to the defender's facing in hexes corresponding to those on the "Radar Homing Missile Air Combat Modifiers Diagram". Based on this diagram, *each* attacking air unit has its "A" factor modified by the modifier ("−1", "−2" or "−3"—other air combat modifiers still apply, but rear attack modifiers are not possible) shown on the diagram for its corresponding mapboard hex.

11.4.1.2.3: For radar homing missile air combats, ignore all combat results against the attacker.

11.4.2 "BRACED" AIR COMBAT CAPABILITIES: Air units with their "A" factor in {braces}—only the EF-111 and RF-4 air units—*cannot* be used as attackers in air combats.

11.4.3 VOLUNTARY ABORT: A player may announce that an air unit voluntarily aborts (see 7.1.5.3) at any time after it enters the mapboard.

11.5 ADVANCED GAME AIR SUPPORT COMBATS: Air support combats are handled exactly as in the Basic Game (see 7.5), except that 7.5.2 no longer applies to units with close air support mission orders. Now, the specific order given to close air support air units ("DAS", "AI" or "SEAD"—see 10.3) restricts and determines which ground and/or helicopter units they can combat.

12.0 THE ADVANCED GAME TURN RECORD AND VICTORY DETERMINATION PHASE

12.1 THE ADVANCED GAME TURN

DAY	TURN	AIR ROUND
-----	------	-----------

RECORD STEP: At the end of every Turn, the NATO side advances

the turn marker one box on the TURN TRACK of the NATO Player Card. In game terms, a "day" lasts 8 Turns. For scenarios that last more than 8 Turns, the day marker should be placed in "1" box of the DAY TRACK of the NATO Player Card during setup. At the conclusion of an 8th Turn, the turn marker should be returned to the "1" box on its TURN TRACK, while the day marker should be advanced a box in its DAY TRACK to start a new game "day" (this is not a clock day—a game day is considered to begin at dawn). The air round marker should be reset in the "1" box on the AIR ROUND TRACK on the PACT Player Card.

12.2 THE ADVANCED GAME VICTORY

DETERMINATION STEP: This is performed only at the end of the game. The number of Turns in a game and the specific victory conditions for a game are given in each scenario.



THE OPTIONAL RULES

INTRODUCTION TO THE OPTIONAL RULES

The Advanced Game Rules should be mastered before trying any of the Optional Rules. The Optional Rules are just that—optional—they can be added to a game in any combinations to suit the players' tastes. Each Optional Rule adds greater scope and detail as well as additional complexity to the play of the game. Most Optional Rules simply add to the Basic and Advanced Game Rules, which still apply unless otherwise stated. Check the SEQUENCE OF PLAY WITH ALL OPTIONS on the Game Card for the new phases required for use of some Optional Rules ("OR").

13.0 REPLACEMENT UNITS

This option is especially recommended for small scenarios (section 26.0) and large scenarios (section 28.0). A heavy loss of headquarters and supply units can bring a ground battle to a screeching halt in a hurry. These units are absolutely essential to the conduct and control of modern military operations and because of this replacement units are available and can be assembled reasonably rapidly. Air organizations generally have some spare aircraft undergoing maintenance or reserves available to replace losses. These "replacement" units become available as covered below and are available to re-enter the mapboard (normal entry rules, on the entry/exit edges specified in the scenario, etc.) to resume their functions.

13.1 HEADQUARTERS REPLACEMENTS:

When a headquarters unit is eliminated, it should be placed on that side's Player Card in the TURN TRACK box that is *two* Turns from the present one. For example, if a headquarters unit is eliminated on Turn 5, it should be placed in the Turn 7 box. Starting on the side's Maneuver Phase in the Turn corresponding to the box number in which the unit is placed, the headquarters unit is considered to be a replacement and can be re-entered onto the mapboard.

13.2 SUPPLY REPLACEMENTS: When a supply unit is eliminated, it should be placed on that side's Player Card in the TURN TRACK box that is *three* Turns from the present one. For example, if a supply unit is eliminated on Turn 6, it should be placed in the Turn 1 (of the following "day") box. Starting on the side's Maneuver Phase in the Turn corresponding to the box number in which the unit is placed, the supply unit is considered to be a replacement and can be re-entered onto the mapboard. For artillery, after an artillery supply unit becomes eligible to re-enter the mapboard (i.e., during the Depletion/Fired Change Step of the Turn after the first Maneuver Phase when the supply unit could be entered), its assigned artillery unit may no longer use any other artillery supply unit for recovery from fired (see 10.2.3.1).

13.3 AIR REPLACEMENTS: When an air unit is damaged, the owner can decide to either leave it in the "Recovery" box, or may advance the unit through "Refuel/Rearm" to the "Ready" area. If a flight with damage is left in "Recovery", the owner may roll 1d6 during the Air Allocation Step. On a roll of 1-2, restore the air unit to full strength and advance it to the "Refuel/Rearm" box as normal.

13.3.1 Air units that have a half flight damage have each of their factors reduced by half, rounded down, to a minimum value of 1.

14.0 TIME AND WEATHER



Weather, in this game, is primarily concerned with visibility. Classical weather concepts that influence military operations, such as mud and snow, are largely negated due to modern equipment and the mapboard's extensive network of well-kept secondary roads (mapboard roads are only the *main* roads). Historically, battles were fought during the day, when you could see where you were going, find something to shoot at and identify friend from foe. Attacks at dawn to surprise a half-awake enemy were commonplace, with the cover of night to conceal movements and the light at daybreak permit the fighting. Radar and night sights have been employed since the Second World War to negate many of the visibility problems and benefits of darkness and foul weather. Still, night and *very* bad weather can degrade effectiveness. Aircraft without radar remain on the ground until pilots can use their eyes to find targets and landing fields. Air defense systems without radars are all but powerless to find and shoot at hostile aircraft in low visibility. Ground troops still grope forward when landmarks are hard to find and see.

14.1 THE TIME AND WEATHER TABLES:

The TIME AND WEATHER TABLES on the Game Card are used with these optional rules. In all cases, *two* dice are rolled to obtain information from these Tables, with the colored die being read first and the white die being read second. For example, a colored "2" and a white "4" is read as "24".

14.2 DETERMINING MAPBOARD TIME:

14.2.1 TIME OF YEAR: Before a game begins, both sides competitively roll one die. If the PACT side roll is higher, the PACT side may select the "month" in which the game occurs. If the NATO side roll is higher, the NATO player rolls the dice to *randomly* determine the "month". The dice numbers that randomly determine each "month" are found just below the month abbreviations. For example, a roll of "31-33" would set the game month as "May". Record the "month" in writing for future reference.

14.2.2 TIME OF DAY: Some of the eight Turns of a game "day" are "daylight" Turns and others are "night" Turns. If a "D" appears in the monthly column (between the "fog" and "cloud" numbers) opposite the current Turn number, that Turn is "daylight". If a "N" appears, that Turn is "night". For example, a March Turn 5 is a "night" Turn and a June Turn 5 is a "daylight" Turn.

14.3 DETERMINING MAPBOARD WEATHER:

There are two types of mapboard weather, "fog" and "clouds", that can influence mapboard operations enough to be included in a game of this scale.

14.3.1: During the Weather Phase of every Turn, the PACT side rolls the two dice once for "fog" and then once for "clouds".

14.3.2: Check the appropriate monthly column and Turn line on either side of the "D" or "N", to find the numbers in the sub-columns labelled "FG" ("fog") and "CL" ("clouds"). In both cases, if the appropriate dice roll *exceeds* the printed number, that type of weather doesn't occur and has no effect on the game. If the dice roll equals or is less than the printed number, that type of weather is considered to be present on the mapboard.

14.3.3: Modify the colored die roll by "-1" (i.e., a "21" becomes an "11") if the weather condition being rolled for was in effect during the previous Turn.

14.4 EFFECTS OF TIME AND WEATHER:

14.4.1 DAYLIGHT: Daylight Turns with no fog or clouds are "normal"—they have no effects.

14.4.2 NIGHT: The limited visibility slows operations down and makes many types of units ineffective. Night Turns have a variety of game effects:

14.4.2.1: Ground and helicopter unit movement points are halved (round fractions up).

14.4.2.2: All ground and helicopter unit combat factors are modified by "-1", except for artillery units using indirect fire, which do not use this modifier.

14.4.2.3: Only air units with underlined "A" or "B" factors can be entered onto the mapboard and moved.

14.4.2.4: Only air defense units with underlined "A" factors can engage in air defense combats.

14.4.2.5: Ranges at which "seeing" or "spotting" are possible are halved in some cases (see 10.3.1.1 for forward air controller's ranges, 10.3.2.1 and 20.1.2 for ranges from interdiction or Primary/Secondary Target hexes, 20.7.3 for standoff weapon ranges, 23.2.2.1 for air visual spotting ranges, and 23.2.2.2 for ground/helicopter visual spotting ranges).

14.4.3 FOG: Fog limits visibility at low altitudes. Fog Turns have a variety of game effects:

14.4.3.1: No air missions are possible and helicopter units may not be moved into new hexes. Helicopter units (if not already) *must* be flipped to their non-moving side during the Turn's Ground/Helicopter Check Step to show that they cannot be moved.

14.4.3.2: Ground units perform as at night (see 14.4.2.1-2).

14.4.3.3: Ground/helicopter spotting ranges (see 23.2.2.2.2) are halved.

14.4.4 CLOUDS: Clouds limit visibility at higher altitudes. Cloud Turns have a variety of game effects:

14.4.4.1: Only air units with an underlined "B" factor can be assigned for close air support missions and only air units with an underlined "A" factor can be assigned for air control missions during the Turn's Air Allocation Step.

14.4.4.2: An air unit with a close air support mission order cannot be stacked with an air unit with an air control mission (i.e., no escorts).

14.4.4.3: Air units with an air control mission may not be used to attack for normal air combats against enemy air units that have close air support mission orders and may not be used to attack moving helicopter units in air support

combats. They can be used to attack for radar homing missile air combats against any enemy air units or for normal air combats against enemy air units that have air combat missions.

14.4.4.4: Air unit to air unit spotting ranges (see 23.2.2.1.1) are halved.

14.4.5 TIME AND WEATHER COMBINATIONS: When conditions are combined (ie., fog at night), all effects of all the conditions are combined for that Turn. Where effects contradict each other, use the *more* restrictive effects. *For example, in a night-fog Turn, helicopter units have halved movements points because of the night, but cannot be moved because of the fog. Since not moving is more restrictive than halving movement, helicopter units cannot be moved during a night-fog Turn.*

15.0 THE ELECTRONIC BATTLEFIELD

Electronic Combat ("EC") is considered to be one of the prime "force multipliers" of modern battle. Normally, the term "Electronic Warfare" is associated with radar capabilities and countermeasures and many of these have already been incorporated into game factors and mechanics, but this is only one part of modern "EC". "EC" also plays a part in the "Suppression of Enemy Air Defenses" ("SEAD") and "Communications, Command and Control Countermeasures" ("C3CM") through electronic "jamming". This rules section expands on earlier rules to present the remaining components of "EC".

NATO CEWI SIGNAL UNIT

Moving Side



Non-Moving Side



PACT REC SIGNAL UNITS

Moving Side



Non-Moving Side



15.1 GROUND "EC": PACT "Radio Electronic Combat" ("REC") and NATO "Combat Electronic Warfare Intelligence" ("CEWI") signal units are used for ground "EC". Ground "EC" is only conducted by these signal units. Possible targets for signal unit "EC" are enemy headquarters and artillery units, both of which employ and depend on extensive radio networks.

15.1.1 SIGNAL UNIT CAPABILITIES: Signal units may not be used to conduct "EC" when their moving side is face-up. Signal units have a range printed *only* on their non-moving side which shows how far their "EC" capabilities can be used. A signal unit is fully effective for "EC" even when disrupted. A signal unit must also have a line of sight to an enemy unit to be used against that unit.

15.1.2 USE OF SIGNAL UNITS—SIGNAL PHASES: Go first side, then second side in carrying out a Signal Phase. To use a signal unit, during a Turn's Signal Phase one eligible enemy unit (headquarters or artillery) per signal unit is nominated as a "target" unit for "EC". Then, for each target unit two dice are rolled and their numbers *added together*. If the dice roll total equals or is less than the range from the signal to the target unit, the "EC" attempt fails and there are no effects. If the dice roll total exceeds the range from the signal to the target unit, the "EC" attempt succeeds.

15.1.2.1: Successful ground "EC" basically negates a headquarters unit's command span. Treat that headquarters unit as if it were eliminated for use in automatic command disruption removal for other units (10.1.1—it can still be used to remove one of its own disruption levels), air defense suppression (10.2.2), flipping units to their moving sides (10.4.1), commanding multiple artillery units (11.3.2.3.1), etc. during the next Turn.

15.1.2.2: Successful ground "EC" makes an artillery unit incapable of attacking for indirect fire combats.

15.1.2.3: For reference, keep a written note of the signal and target units in successful ground "ECs".

15.1.2.4: A successful "EC" continues for Turn after Turn until either the signal or target unit is moved or eliminated or until it is announced during a Signal Phase that a signal unit is "breaking-off" a successful "EC" to attempt another one.

15.2 AIR "EC": Air "EC" is conducted by special jamming aircraft that are effective against enemy air defense and air defense headquarters units and air units.

15.2.1 DEFINING "EC" AIR UNITS: NATO EF-111 air units represent special purpose aircraft designed for this purpose and *must* be used for only this purpose when this option is used. PACT Su-24 air units *may* be used for this purpose, but the PACT side must make a note about which of these air units has this capability *before* a game begins—the air units so designated *must* then be used for only this purpose. These are the only "EC" air units included in the game. "EC" air units are given "SEAD" orders, but instead of the normal capabilities of aircraft with these orders, none of which apply, they have the following capabilities:

15.2.2 EFFECTS OF "EC" AIR UNITS: An "EC" air unit can "jam" enemy air, radar air defense and air defense headquarters units, and can do so during as many Air Rounds as it is present on the mapboard (even at half-flight strength) without being eliminated or forced to abort. An "EC" air unit eliminated or forced to abort earlier in an Air Round has no effect on operations for the rest of that Air Round. Since an "EC" air unit needs to be moved every Air Round it is on the mapboard, its effects may vary with its *current* location at that point in an Air Round. For air "EC" effects to apply, an enemy unit must be in an "EC" air unit's line of sight.

15.2.2.1 AIR "EC" EFFECTS ON ENEMY AIR UNITS: *Anytime* an "EC" air unit meeting all requirements is present on the mapboard, all eligible enemy air units anywhere on the mapboard with air control missions have their capabilities reduced as follows:

15.2.2.1.1: A "-2" modifier applies to their "A" factor for all combats.

15.2.2.1.2: The "+1" modifier for a rear attack (see 11.1.1) is not used when they attack for air combats.

15.2.2.1.3: They can make no no attacks for radar homing missile air combats.

15.2.2.2 AIR "EC" EFFECTS ON ENEMY GROUND UNITS: "EC" air units that meet all requirements can be used for "jamming" directly against enemy *radar* air defense units (those with underlined "A" factors) and *any* air defense headquarters units in two ways:

15.2.2.2.1 Standoff Jamming ("SOJ"): All enemy air defense headquarters units at a range of 16 to 30 hexes from an "EC" air unit are victims of "SOJ". All *radar* air defense units

commanded by these headquarters units are treated the same as if they were suppressed (see 11.1.4).

15.2.2.2.2 Close-In Jamming ("CIJ"): All enemy air defense headquarters units within a range of 15 hexes from an "EC" air unit are victims of "CIJ". All *radar* air defense units commanded by these headquarters units are reduced to 1/2 of their normal range (round fractions up)

These changes also apply individually to any *radar* air defense units within 15 hexes range that either have no air defense headquarters unit or none within 15 hexes range of the "EC" air unit.

15.2.2.2.3 Jamming Combinations: Suppressed units (see 10.2.2) *also* under "SOJ" suffer the "CIJ" changes. Units under *both* "SOJ" and "CIJ" suffer the "CIJ" changes only. Multiple applications of the same type of jamming have no extra effects—for example, a unit under "SOJ" from more than one "EC" air unit suffers only singular "SOJ" changes.

15.2.2.2.4 Lasting Jamming Effects: Any "EC" air units that are not eliminated or aborted during an Air Phase and that exit during the tenth and final Air Round of an Air Phase can be considered to be present on the mapboard and "jamming". Their hex position is considered to be their location *before* the tenth Air Round's movement. The jamming is effective during the *following Turn's Maneuver Phase* (this will change air defense combats against helicopters at that time). Make a written note of these "jamming" hexes to determine any "SOJ" and "CIJ" effects during that Maneuver Phase.

16.0 "NBC" WARFARE



The threat of nuclear, biological and chemical ("NBC") weapons looms ominously over the modern battlefield. In most cases, the long-term effects, civilian casualties and chances for escalation make their use so fearsome that there are victory point penalties for their use in the scenarios.

16.1 TACTICAL NUCLEAR WEAPONS: Used as weapons of desperation, the consequences could be horrendous and a small tactical nuclear exchange could escalate into a total global holocaust. Tactical nuclear weapons are included in *TAC AIR* only to demonstrate their effects in limited use on the front lines.

16.1.1 EFFECTS OF TACTICAL NUCLEAR WEAPONS: Each nuclear strike has a designated "impact hex" and immediately effects every ground and helicopter unit as well as minefields and bridges within a 2 hex range and with an unblocked line of sight from the impact hex.

16.1.1.1: Any ground or helicopter unit in an impact hex is automatically eliminated. Any bridge in a hexside included in the impact hex is blown up and marked accordingly. Any minefield in the impact hex is also eliminated and removed from the mapboard. If the hex is an urban or woods hex, place an obstruction marker in the impact hex (these obstruction markers do *not* count against a side's limit of three on the mapboard at any one time—see 18.1.1).

16.1.1.2: Any ground unit (with exceptions in 16.1.1.3) adjacent to the impact hex has three disruption levels marked on it. Any ground unit two hexes from the impact hex has 2 disruption levels marked on it. Airmobile paratrooper units get these disruptions *and* lose their helicopter

mobility—treat these units the same as if they had been dropped by aircraft (see option 17.2.5).

16.1.1.3: Any helicopter (other than airmobile), headquarters, supply and air defense unit within a two hex range from the impact hex is automatically eliminated.

16.1.1.4: Tactical nuclear weapons have no further effects after the immediate ones.

16.1.2 TACTICAL NUCLEAR WEAPON AVAILABILITY: Availability is given in the individual scenarios. The number of weapons given can be expended once each with any desired delivery system as a game is played.

16.2 BIOLOGICAL AND CHEMICAL WEAPONS: These weapons have very similar battlefield effects, so they are considered as one weapons system here. These weapons are most effective against an unprepared enemy. When both sides are equipped to fight in a biological and/or chemical environment, *both* sides lose a degree of combat effectiveness.

16.2.1 EFFECTS OF BIOLOGICAL AND CHEMICAL WEAPONS: Each strike has a designated "impact hex" and effects every ground and helicopter unit in and adjacent to the impact hex.

16.2.1.1 IMMEDIATE EFFECTS: Each ground and helicopter unit in or adjacent to the impact hex when the weapon is used *immediately* has one disruption level marked on it.

16.2.1.2 LASTING EFFECTS: "Lasting" effects can be for the rest of the Turn and the following Turn (for short-term weapons) or for the rest of the game (for long-term weapons). For reference, make a note of these hexes. Each ground and helicopter unit that engages in *any* form of combat while in or adjacent to the impact hex while its effect last is modified by "-1" on its combat factors in all combats.

16.2.2 BIOLOGICAL AND CHEMICAL WEAPON AVAILABILITY: Availability is given in the individual scenarios. The number of weapons given can be expended once each with any desired delivery system as a game is played.

16.3 NBC DELIVERY SYSTEMS: NBC weapons can be delivered by any undisrupted artillery units or by air units with direct air support ("DAS") or air interdiction ("AI") orders. The decision to use these weapons during a Turn must be made during the Air Allocation Step of that Turn for *both* air and artillery units. The NBC weapon is delivered *instead* of using the unit for a normal indirect fire or air support combat.

16.3.1: Air units are assigned these weapons by adding the notations "BC" (for biological and chemical) or "N" (for nuclear) to their mission order notations (ie., "DASBC", "DASN", "AIBC" or "AIN"). For biological and chemical weapons, the notation "L" (for "long-term") or "S" (for "short-term") is further added (ie., "DASBCL"). For "DAS" orders, the impact hex is not preplotted, but can be chosen when the "strike" is delivered and can be any hex that the forward air controller unit can "see". For "AI" orders, the impact hex must be pre-plotted and is the same as the interdiction (or Primary/Secondary Target—see 20.1) hex. If *not* used (a side may voluntarily decide not to do so or a combat result may prevent use) and the air unit returns safely during an Air Phase, the weapon is not expended and is still available for later use using any desired delivery unit. If the air unit is eliminated, the weapon is considered to have been expended—

the loss of the air unit also means the loss (and expenditure) of the weapon—these weapons have no effects when their air unit is eliminated.

16.3.2: For artillery units, write "BC" or "N", depending on the weapon and the artillery unit's designation to show that it has the weapon. Also note any desired impact hex within range—the hex is not necessarily one that can be "seen" by the artillery unit. If the opportunity arises, the artillery unit may alternately use the weapon for counterbattery combat (at an indirect firing enemy artillery unit—the enemy artillery unit's hex becomes the impact hex and the NBC weapon's effects are resolved *before* any other counterbattery combat) or use it at the very end of its side's Maneuver Phase on the designated impact hex (no counterbattery to this is possible). The artillery unit is flipped to its "F" non-moving side after use. As with air units, if not used, the weapon is not expended and is still available for later use. If the artillery unit is eliminated, the weapon is considered to have been expended—the loss of the artillery unit also means the loss (and expenditure) of the weapon—these weapons have no effects when their artillery unit is eliminated.

16.4 NATO NBC RESTRICTIONS: The "impact hex" for a NATO NBC weapon cannot be within a 5 hex range of any West German urban hex.

17.0 AIRMOBILE/AIRBORNE FORCES

The PACT Soviet 103rd Guards Airborne Division and the NATO West German 26th Airborne Brigade are included in *TAC AIR* to show how these unit types may be employed on a modern mechanized battlefield. The Soviet division has significant combat power and may penetrate to threaten NATO rear areas and secure an airhead in front of an advancing PACT mechanized column or to screen or reinforce a flank. The smaller German brigade gives the VII Corps commander a flexible and maneuverable force to use as a reserve, flanking or security force. Because of the extreme flexibility of these units, players using them are called on to use their imaginations as, to demonstrate their capabilities, these units may be used to represent things other than what is actually printed on the unit counters (there *are*, after all, only two sides on a unit counter).

17.1 OPTIONAL PARATROOPER UNIT SIDES: All other units in the airborne organizations are standard and work the same as other units of the same types. The paratrooper units are unique, as follows:

17.1.1 WEST GERMAN PARATROOPERS:

The German paratrooper units show a paratrooper unit (leg movement type) on one side (which represents them as a *ground* unit on foot) and a generalized air formation symbol on the other, or air unit side (which represents them as an air unit carrying the paratroopers to a drop zone). When used, the air unit side is treated as being on a close air support mission and has the following information if defending in air defense or air combats:



The air unit side can, if desired, instead be considered as a *helicopter* unit side (showing the paratroopers as "airmobile" units transported by helicopters) with this information:



17.1.2 SOVIET PARATROOPERS:

The Soviet paratrooper units of the 583rd and 688th regiments can be handled exactly the same (considered to be an air or helicopter unit on one side) as the German paratrooper units. The paratroopers of the 393rd regiment, on the other hand, show Soviet paratroopers as they appear when using their BMD vehicles (in which case they are basically normal infantry units). If desired, the 583rd and 688th paratrooper units can instead be considered to be motorized rifle units with the same information as is printed on the 393rd units (use them for unit information reference). Alternately, the 393rd units may be considered to be like the paratroopers of the other two regiments (and their units can be used for unit information reference). When using units in these ways, consider a 583rd and 688th paratrooper side=a 393rd moving side and a 583rd and 688th air or helicopter side=a 393rd non-moving side, whichever way they are considered to be for use in a game.

17.1.3 CHOOSING PARATROOPERS: Before a game begins, both sides secretly write how their paratrooper units are to be considered for the game (all paratrooper units of the same brigade or regiment must be designated identically). These choices apply for the rest of the game.

17.2 USING PARATROOPER/AIR UNITS: Paratrooper units considered to be of this type are "flown" by their "transport" aircraft to "drop zones". The air unit sides of paratrooper units may be used for no other air missions.

17.2.1 PREPARATION/NOTATIONS: These paratrooper unit's can be entered onto the mapboard as air units during daylight, night and/or cloud (clouds have no effects) Turns. They cannot enter the mapboard during fog Turns. On their entry Turn, the paratrooper units, air unit side up, must be placed in the "Close Air Support" box on the Player Card. Each paratrooper unit may be used to "carry" one other non-paratrooper (headquarters, reconnaissance, artillery, air defense or supply) unit that is part of the division or brigade. A secret written note must be made for each unit's (including "carried" units) "drop zone" hex. Each unit must have a *different* drop zone hex designated and a "carried" unit must be "dropped" *before* the paratrooper unit that carries it.

17.2.2 AIR MOVEMENTS: The air units enter and are moved on the mapboard during the Air Phase, air unit side up, the same as a normal (slow air movement type=6 movement points per Air Round—unlike A-10s, they may only be turned one hexside per hex entered) air units until the paratroopers are "dropped". The enemy must be told that these are paratroopers only when they actually enter the mapboard, as their numbers and formations would serve to distinguish them from normal tactical air formations once "in the air". They cannot be stacked with each other or with other air units.

17.2.3 RESULTS OF AIR DEFENSE OR AIR COMBATS ON PARATROOPERS: If eliminated by air defense and/or air combat, the paratrooper unit is eliminated *plus* any unit that may have been

“carried”. If there is an abort result, the paratrooper (and, if present, the “carried” unit) must follow “drop” procedures (see 17.2.4) immediately, using the current hex as the drop zone hex and the dropped unit(s) are immediately marked with one disruption level for the combat result. If there is a half-flight result, handle the same as for an abort result, but mark unit(s) with 2 disruption levels for the combat result.

17.2.4 DROP PROCEDURES: This procedure is followed if forced to do so by combat or when the unit enters its drop zone hex. For each unit “dropped”, roll two dice, reading the colored die first and then the white die, and consult the appropriate PARATROOPER DROP ZONE DIAGRAM on the Game Card (use the “Daylight” Diagram if option 14.0 is not being used). Depending on the number rolled, the unit being “dropped” is flipped over to its leg movement type side (if a paratrooper unit) or non-moving side (if another type of unit) and placed in the mapboard hex that corresponds to the hex shown on the diagram. If a unit “drops” on top of another ground or helicopter unit, roll the dice again until an unoccupied hex is found for the unit.

17.2.4.1: Any unit that “drops” in a lake or minefield (*anybody’s*) hex is eliminated.

17.2.4.2: Any unit that “drops” in a woods, urban or obstructed hex is marked with 1 disruption level.

17.2.4.3: If no unoccupied hex is available, a “dropped” unit is eliminated.

17.2.4.4: No maneuver combats are fought by the “dropped” units at this time, even if adjacent to an enemy unit or units. Assume that the aircraft that dropped them have somehow made their way home—they can be ignored for the rest of the game.

17.2.5 LATER TURNS: The “dropped” units are handled as leg movement type ground units for the rest of the game (see 17.4).

17.3 USING PARATROOPER/HELICOPTER (“AIRMOBILE”) UNITS: Paratrooper units considered to be of this type are “airmobile”. Movement depends on the side flipped up at the start of a Maneuver Phase, moving the same as a helicopter unit (10 movement points per Maneuver Phase—can be engaged in air defense combats) if that side is up and as a leg movement type ground unit if that side is up. When performing a Ground/Helicopter Check Step (see 10.4.1), if marked with 2–3 disruption levels or not in command, the paratrooper side must be flipped up.

17.3.1: When moved as a helicopter unit, the unit *must* always be flipped (at movement costs to flip—see 6.4.4) to its paratrooper unit side at the end of its movement, even if movement ends as a result of an air defense combat.

17.3.3: These airmobile helicopter units cannot “carry” other units as the air units do.

17.4 SPECIAL LEG MOVEMENT RULES: The paratrooper units are the only leg movement type (“+”) ground units in the game. They perform like other ground units, with a few special rules. Since the paratrooper units do *not* have a non-moving side, they can never be flipped to it (i.e., ignore 10.4.1). Leg movement type units, unless marked with 2 or more disruption levels (even if not in command) may always be moved one hex per Maneuver Phase and no more (EXCEPTION: see option 19.3, if used), regardless of the terrain movement costs to enter the hex. Combat modifier 11.1.2 (COMBAT CHART note “c”) does not apply for paratrooper (leg unit side) units.

17.5 USING SOVIET MOTORIZED PARATROOPER UNITS: When considered to be used as infantry units, that is exactly how the units are used. No special rules are required.

18.0 ENGINEER OPTIONS

These are some additional things that can be done with engineer units:

18.1 PERFORMING OPTIONAL ENGINEER



TASKS: Using this option, an undisrupted engineer unit can “place” or “clear” a minefield or “place” obstructions (debris that impedes movement) in a hex by remaining in the hex for its own *entire* Maneuver Phase with its non-moving side up. Place or remove the marker at the end of the side’s portion of a Maneuver Phase. If disrupted or eliminated during its Maneuver Phase, it does not perform the task. Minefields may be placed only in road or urban hexes. Obstructions may be placed only in woods hexes with roads or urban hexes. Neither may be placed in urban hexes that are objectives in the scenario being played.

18.1.1: A side may never have more than 3 obstruction (EXCEPTION: see 16.1.1.1) and 3 minefield hexes on the mapboard at one time.

18.1.2: Minefields are shown by placing a minefield marker in the hex. A minefield marker is removed when it is cleared.

18.1.3: Obstructions are shown by placing an obstruction marker *inside* a hex. These are differentiated from obstruction markers showing blown up bridges since they are placed directly *inside* a hex instead of covering a bridge hexside (see 9.4.1.3.2). Obstruction markers cannot be removed.

18.1.4: If markers run short, announce the location and make a written note for later reference.



18.2 EFFECTS OF MINEFIELDS: Minefield hexes have no effects on air units or moving helicopter units. They only have effects on ground units and non-moving helicopter units.

18.2.1: Minefield hexes may be entered, passed through or remained in by any ground or non-moving helicopter units of the side that placed it without penalty.

18.2.2: Engineer units may enter enemy placed minefield hexes at a cost of 1 extra movement point to enter the hex. Other ground units may not enter enemy placed minefield hexes unless a friendly engineer unit is also in the minefield hex—in this case, other ground units may pass through (not remain in) the enemy minefield hex at a cost of 1 extra movement point to enter the minefield hex.

18.2.3: Any helicopter unit in any enemy minefield hex with its non-moving side up is automatically eliminated.



18.3 EFFECTS OF OBSTRUCTIONS: Obstruction hexes do not effect air units or moving helicopter units. They only effect ground units and non-moving helicopter units.

18.3.1: Any ground units may enter an obstruction hex, but it costs them 3 extra movement points to do so.

18.3.2: Any helicopter unit in an obstruction hex with its non-moving side up is eliminated.

19.0 MOVEMENT OPTIONS

19.1 SHIFTING INITIATIVE: Having a different order of play from “day” to “day” and/or within a Turn can lend an unusual and interesting “twist” to a game.

19.1.1 DAILY INITIATIVE: During the Initiative Phase of Turn 1 of every game “day” after the first one (these are the *only* Turns an Initiative Phase is used), both sides competitively roll 1 die. If the roll is a “tie”, the side that was the first side on the previous “day” remains the first side for the current “day”. Otherwise, the side with the high roll may decide which side will be the first side and which will be the second side for the current “day”. Even if option 19.1.2 is used, this initiative always applies for Ground/Helicopter Check Steps and Maneuver Phases.

19.1.2 PHASE INITIATIVE: Regardless of who is officially the first side and second side during a Turn, players may competitively roll dice the same as in 19.1.1 at the start of each Preparation Phase to determine the first side for its first three steps, at the start of each Air Phase, and again at the start of each Signal Phase to determine the first and second sides for each.

19.2 EXTRA GROUND MOVEMENT: During their Maneuver Phase, any undisrupted ground units with their moving sides up may have one or two *extra* movement points added to the end of their movement. When this is done, each *extra* movement point used causes 1 disruption level on the units as it is expended.

19.3 GROUND AND HELICOPTER STRATEGIC MOVEMENT: Ground and helicopter units using “strategic movement” may have their total available movement points (*including* extra ones from 19.2, if desired) **up to tripled** (for leg movement units, movement up to three hexes) for use during a Maneuver Phase. During their Maneuver Phase, *undisrupted* ground and helicopter units with their moving sides up that do not start adjacent to any enemy ground and/or helicopter units may be used for strategic movement under the restrictions listed below:

19.3.1: Ground units used for strategic movement must begin their Maneuver Phase in a road or urban hex, make *all* moves through road and/or urban hexes and complete movement for the Maneuver Phase in a road or urban hex. At no time during strategic movement may they be moved adjacent to an enemy ground or helicopter unit. All ground units except artillery and air defense units (unless disrupted by anti-tank combat—see 20.8) must keep their moving side up when strategic movement is completed. Artillery and air defense units (to show that they cannot be moved that far and still be used for indirect fire or air defense combats) *must* be flipped to their non-moving sides when their strategic movement is completed.

19.3.2: Helicopter units used for strategic movement are not required to move through road and/or urban hexes. At no time during strategic movement may they be moved adjacent to an enemy ground or helicopter unit. Helicopter units (unless disrupted by air defense combat) *must* keep their moving side up when strategic movement is completed.

19.3.3: A unit using strategic movement that is disrupted by anti-tank or air defense combats while moving must immediately end its movement for the Maneuver Phase in the hex where it was disrupted with its moving side up.

20.0 COMBAT OPTIONS

20.1 WRITTEN AIR INTERDICTION FLIGHT PLANS: With this option, air units with air interdiction ("AI") orders must have their exact "flight plan" (route of hexes) for the Air Phase written down from entry to exit during the Air Allocation Phase, instead of just listing an "interdiction hex". This flight plan *must* be followed exactly unless the air unit aborts.

20.1.1: The easiest way to plot a flight plan is to just list hex designations where the air unit turns. *For example, a flight plan of "Enter B11 to G14 to L11 to B6 Exit" gives an exact route without listing every hex to be entered.*

20.1.2: "Primary" and "Secondary" Target hexes must also be plotted. These hexes should lie in hexes that will be entered by following the flight plan and serve as "interdiction hexes" when this option is used. During the Air Phase, while an air unit is following its flight plan, when the Primary Target hex is entered, the air unit can use it as an interdiction hex as restricted in 10.3.2, except that a target unit must be "seen", be within range and *also* be on the air unit's flight plan route. If any (player's choice if more than one) eligible target is available from the Primary Target hex, it *must* be engaged in an air support combat. If no target is available from the Primary Target hex, the same procedure is followed when the Secondary Target hex is entered.

20.1.3: The Air Round when the air unit is to enter the mapboard must also be plotted.

20.1.4: A written notation for air interdiction orders using this option should include an order notation ("AI"), the air unit's designation, the Air Round when it will enter the mapboard, the flight plan, and the Primary ("PT") and Secondary ("ST") Target hexes. *For example, the notation, "AI 14—Air Round 2—Enter B11 to G14 to L11 to B6 Exit—PT G14—ST K12" covers an entire mission.*

20.1.5: When forced to abort because of a combat result or voluntarily, an "AI" mission air unit (and escort, if any) may follow normal abort procedures (see 7.1.5.3) or abort and continue to follow its plotted flight plan (information side up), as desired.

20.2 BOMBING BRIDGES: This is a special type of air interdiction mission where the target is immobile and its location is known to all (i.e., no need for air reconnaissance—see option 21.0).

20.2.1: The letters "BR" (for "bridge") should be added to the air interdiction notation (full notation now "AIBR") to indicate that the target is a bridge. When writing the orders, the interdiction hex (or Primary Target hex if option 20.1 is used) should be one of the hexes of which the bridge hexside is a part.

20.2.2: During the Air Phase, the bridge is "bombed" (ignore any unit that might be in the hex) when the written hex is reached. Fight a normal air support combat, treating the bridge as if it were a defending unit with a "B" factor of "4". Ignore all terrain modifiers when attacking a bridge. If there is a "D2" through "D4" result, the bridge is blown up and marked (see 9.4.1.3.2).

20.3 JOINT AIR ATTACK TACTICS: The concept of "Joint Air Attack Tactics" ("JAAT") is one that is so far found only in U.S. doctrine and training. A-10 aircraft and Apache attack helicopters are trained to operate as an integrated team. To use "JAAT" in *TAC AIR*, a U.S. helicopter (*not* the helicopter side of an airmobile) unit with its moving side up must be adjacent to

an enemy *ground* unit and also be the forward air controller for an A-10 air unit(s) with "DAS" orders. If the A-10 air unit(s) engages the enemy ground unit in an air support combat, the adjacent helicopter unit's "A" factor (unless disrupted) may be added to the A-10 air unit "A" factor(s) for the combat. Modifiers "a", "c", "f" and "k" from the COMBAT CHART all apply for "JAAT". This can be done even if the helicopter unit already engaged in maneuver combat with the same or a different unit during the Maneuver Phase.

20.4 INTEGRAL AIR DEFENSE: Modern ground units, with the exception of headquarters and supply units (which lack this capability) and air defense units (which are already provided for), are well-equipped with light air defense weaponry in the forms of numerous automatic weapons and manportable surface-to-air missiles. This air defense capability can be used only during daylight Turns (if option 14.0 is used). There are two possible options for this capability and players may choose to use only one of them in a game:

20.4.1 SIMPLE OPTION: Do *not* ignore adverse combat results to air units used in normal air support combats (this does not apply when option 20.7 standoff weapons are used) against ground units with integral air defense.

20.4.2 DETAILED OPTION: This option is more realistic, but can lead to a great deal of dice rolling.

20.4.2.1: For air defense combat purposes, these ground units have an "A" factor of "2" against helicopter units and "1" against air units. They have a range of 1 hex against helicopter units and "0" (same hex only) hexes against air units. They are *not* considered to be radar equipped or gun-armed for air defense combats (i.e., modifier 11.1.3—note "d" on the COMBAT CHART does not apply).

20.4.2.2: All normal rules for air defense combats apply to these units, except that they are *never* considered to be depleted and there is no need for a depletion die roll.

20.5 IDENTIFICATION FRIEND OR FOE ("IFF"): Anyone on the ground has a difficult time deciding which fast-moving low-flying aircraft (helicopters, being slower, are less of a problem and not considered here) are friendly and which are hostile. Consequently, electronic identification systems are used on radar air defense systems that pick up signals from friendly aircraft. Other air defense systems are entirely dependent on criteria based on visual identification, location, direction of movement, etc. This is called "Air-space Control". Unless this option is used, air defense units never fire on friendly aircraft and fire at hostile aircraft whenever desired, with no planning on the part of the players. In reality, this perfect coordination (even with radar-equipped air defense units) takes a lot of work and is not 100% foolproof. This option really puts the "Tac Air" into *TAC AIR* and requires players to suffer penalties for mixing friendly and enemy aircraft too closely and/or to take the time to create detailed Airspace Control plans. Option 20.5.1 is easy to implement and can be used alone or in conjunction with the more detailed, realistic and time-consuming option 20.5.2.

20.5.1 AIRCRAFT PROXIMITY PREVENTING COMBAT: No air defense unit of any type may be used for air defense combat against an enemy air unit(s) that is within a 5 hex range of a friendly air unit(s) except when the enemy air unit(s) actually enters the air defense unit's hex.

20.5.2 AIRSPACE CONTROL PLANNING: This option calls for detailed *written* planning, but gives a great "feel" for the detailed staff work necessary for successful tactical air operations. Since this can be a great deal of trouble, it is only recommended for multi-player games with separate air commanders and lots of available time. Basically, the planner, during a Turn's Air Allocation Step, uses three types of orders ("Weapons Hold", "Weapons Free" and "Weapons Tight") and issues them to apply in designated areas on the mapboard to determine how air defense units will react to aircraft that enter these areas.

20.5.2.1 DESIGNATING MAPBOARD AREAS: Mapboard areas can be designated in a number of ways, and the Airspace Control planner should always try to use the easiest to reduce writing:

20.5.2.1.1 Hex Rows: The mapboard areas can be hex rows, possibly inclusive only from one particular hex to another particular hex. *For example, "area hex row GG5 to GG20".*

20.5.2.1.2 Geographic: Especially for large, circular or defined odd-shaped areas like cities, it may be easiest to just define a geographical area. *For example, an area could be defined as "area all urban hexes of Bamberg", "area all hexes south of hex row 25" (i.e., all hexes numbered higher than 25) or "area all hexes within 3 hexes of hex AAA15".*

20.5.2.1.3 Outline: Any area can be outlined by listing its "corner hexes", and all hexes included in the outline or enclosed by the outline are part of the area. *For example, "area outline Y4 to Y6 to AA5 to AA3", describes an area consisting of hexes Y4, Y5, Y6, Z3, Z4, Z5, AA3, AA4 and AA5.*

20.5.2.1.4 List: Especially for small areas of a few hexes, it is easiest to just list all the hexes.

20.5.2.1.5 Remaining: Once the areas for two of the three types of orders have been defined, the areas for the third type of order (which should be "Weapons Hold" or "Weapons Free", since "Weapons Tight" requires more detail and may vary with the areas) can be defined as "remaining areas" (i.e., any areas not covered for the first two types of orders. *For example, "all remaining areas are Weapons Hold".*

20.5.2.2 "WEAPONS HOLD" ORDERS: With these orders, ground commanders have been told not to fire at *any* aircraft in an area. An air defense unit may not use air defense combat against *any* air unit(s) in areas with "Weapons Hold" orders, except when the enemy air unit(s) enters the air defense unit's hex.

20.5.2.3 "WEAPONS FREE" ORDERS: With these orders, ground commanders have been told to fire at *any* aircraft in an area. In these areas, an air defense unit *must* engage *any* (including friendly) air unit(s). This order could be safely given for the entire mapboard on Turns when no friendly air movements are planned.

20.5.2.3.1: Against friendly air units, *every* air defense unit *must* be used for air defense combats on every possible occasion. Against enemy air units, the controlling player still can choose when and where to engage.

20.5.2.3.2: If desired, option 20.5.1 may still be used prevent air defense combats if an enemy air unit(s) is within 5 hexes of any friendly air unit. However, there is a further exception to 20.5.1 in that air defense combat is possible if the enemy air unit(s) is in a "Weapons Free" area and all of the friendly air units within a five hex range are in areas or operating under criteria where "Weapons Hold" orders apply.

20.5.2.4 "WEAPONS TIGHT" ORDERS: This order is really a combination of the other two types

of orders, and the combinations may be different in each area. In "Weapons Tight" areas, one of the other two types of orders applies depending on other criteria, which the player can add in any combinations desired to "Weapons Tight" orders as follows:

20.5.2.4.1 Time: One type of orders could apply during some Air Rounds and the other during other Air Rounds. *For example, "In this area, Weapons Hold orders apply during Air Rounds 3-5 and 8-10 and Weapons Free orders apply during the other Air Rounds."*

20.5.2.4.2 Directions And Flight Plans: One type of orders could apply to air units moving in some directions or following specific flight plans (ie., "Weapons Hold" orders for the directions and/or routes in which your air units are planned to move and "Weapons Free" for everything else) while the other type of orders could apply to any air units not meeting these criteria (ie., "Weapons Free" on air units going in other directions or following different routes). These criteria could also be varied with the time, etc. in combination with 20.5.2.4.1.

20.5.2.5 CONFLICTING ORDERS: Should there be conflicting or unclear orders, *always* assume that the orders are "Weapons Free".

20.6 OPTIONAL AIRCRAFT: These are additional types of aircraft that can be introduced into the game:

20.6.1 THE TORNADO ECR: The "Tornado ECR" is an aircraft currently under development by West Germany that should be deployed by the late 1980s. To use Tornado air units for Tornado ECR air units, the NATO side should make a note that this is the case before a game begins. A Tornado ECR air unit is very flexible and may be used with "SEAD" orders as a Wild Weasel (see 9.5) or with "RF" orders for air reconnaissance (see option 21.0).

20.6.2 PACT WILD WEASELS: The Soviets have no known dedicated Wild Weasel aircraft in production, but often copy the West and have developed an anti-radiation missile. Likely candidates for this configuration are the MiG-23, MiG-27 or Su-24. To use any of these air units as Wild Weasels, the PACT side should make a note that this is the case before a game begins. Such air units with "SEAD" orders are then considered to be Wild Weasels (see 9.5).

20.7 STANDOFF WEAPONS: "Standoff weapons" are air carried "electro-optical" ("EO") guided missiles that can be carried instead of bombs and which can be used to attack targets from a distance. Since they are more expensive and less plentiful than more conventional bombs, their use is restricted to targets that would otherwise be extremely difficult or dangerous to reach.

20.7.1: No more than 4 air units per Turn per side may be assigned to use standoff weapons. Only air units with a "B" factor of "3" or more may use them on close air support missions. Standoff weapons may be used against ground units, non-moving helicopter units and bridges only.

20.7.2: To plot orders for an air unit to use stand-off weapons, add the notation "SO" to the normal close air support mission orders (ie., "DASSO", "AISO", and "SEADSO").

20.7.3: Standoff weapons are used by resolving air support combats as usual, except that the air unit may be up to 4 hexes range (halved at night—see option 14.0) from the target hex. The air unit's front must point *directly* to the target hex down a straight row of hexes and there must be an unblocked line of sight from the air unit to the target.

20.7.4: Standoff weapons cannot be used as NBC (option 16.0) or temporary minefield (option 20.9) delivery systems. They can be used with air interdiction orders against bridges (option 20.2—the combined notation is "AISOBR").

20.8 LONG-RANGE ATGM: The anti-tank guided missile ("ATGM") units have the capability of accurately firing large numbers of anti-tank missiles (other types of units using these weapons have fewer and are ignored for this rule) at approaching enemy vehicles from a range of 2 hexes.

20.8.1 ATGM vs Enemy Ground Units: Once per maneuver phase (for each player), an ATGM unit may make an attack against an enemy ground unit that moves within range.

20.8.2: As with an air defense unit engaging a moving helicopter unit, a non-phasing ATGM unit that meets all the requirements can be used to announce an "anti-tank combat" against a moving enemy unit that is at a one or two hex range from the ATGM unit, with an unblocked line of sight. An ATGM may be used to do this only once per Maneuver Phase.

20.8.3: An ATGM combat is resolved the same as a normal ground-to-ground combat, except ignore all terrain modifiers for the attack.

20.8.4: Adverse results to an ATGM unit in an anti-tank combat are ignored *if* the range is 2 hexes. They are not ignored if the range is only 1 hex.

20.9 AIR AND ARTILLERY DELIVERED MINEFIELDS: Large quantities of small temporary mines can be rapidly spread over a wide area by special artillery shells and aircraft bombs to block an advancing enemy. These mines are *timed* to explode over a period of time up to three hours (one Turn) after being placed.

20.9.1 TEMPORARY MINEFIELD DELIVERY SYSTEMS: Temporary minefields can be delivered by using the same procedures as for NBC weapons (see option 16.3), with the following differences:

20.9.1.1: Air units used may have only air interdiction orders.

20.9.1.2: The notation "M" is used instead of "N" or "BC" to indicate the use of mines. If the impact hex selected contains a ground or helicopter unit, that unit is immediately marked with 1 disruption level.

20.9.1.3: The selected impact hex must be a road or urban hex.

20.9.2 TEMPORARY MINEFIELD QUANTITIES: There are no limits on the number of these weapons available to both sides for use during a game, but the number of temporary minefields and/or regular minefield markers that a side may have on the mapboard at any one time may not exceed three.

20.9.3 EFFECTS OF TEMPORARY MINEFIELDS: Temporary minefields have the same effects as regular minefields and are used the same

way (see option 18.2), except that their markers are on the mapboard only during the one Turn *after* they are placed and they are considered to have been placed by an enemy of *both* sides. Option 18.2.3 does not apply with temporary minefield hexes; non-moving helicopter units in them are not automatically eliminated.

21.0 AIR RECONNAISSANCE

As a gamer, you get a really clear picture of the opposing forces just by looking across the mapboard. In real life, the picture would be far less clear, especially what is happening behind the enemy's front line. Air reconnaissance is needed to bring new information and to confirm other information. The advent of high-technology reconnaissance platforms with truly amazing cameras and sensors goes a long way toward improving tactical intelligence.

21.1 RECONNAISSANCE AIRCRAFT: For this option, the NATO RF-4 air units *must* be used only for air reconnaissance missions. The PACT MiG-21 and/or Su-17 air units *may* be used for air reconnaissance or for other missions. When this option is used, no air interdiction ("AI") orders may be given (EXCEPTION: allowed against bridges—see option 20.2) except against hexes for which "information" was collected by air reconnaissance during the previous Turn.

21.2 AIR RECONNAISSANCE ORDERS ("RF"): During Air Allocation Steps, the air units must be advanced into the "Close Air Support" box on the Player Card and air reconnaissance mission orders written. "RF", for "Reconnaissance Flight" is the order notation

21.3 COLLECTING INFORMATION: These air units do not carry bombs, can engage in no air support combats and may only defend in air combats. They may have an "escort". Their mission is to collect "information" and get back safely.

21.3.1: An "RF" mission air unit collects "information" in every hex it enters. During daylight Turns (if option 14.0 is used, otherwise this always applies), every hex adjacent to the hexes it enters also has "information" collected.

21.3.2: "Information" is collected only prior to aborting (if it does so)—no "information" is collected *after* an "RF" order air unit aborts. Since a pre-plotted flight plan is used, "RF" missions may follow abort procedures as in 20.1.5. All collected "information" is unaffected by a half-flight loss, but is *all* lost if the air unit is eliminated.

21.4 POST RECONNAISSANCE TARGETING: The "information" collected by an "RF" mission can be used on the following Turn only. Any hex where "information" was collected and *only* those hexes can be used as interdiction hexes (or as Primary and Secondary Target hexes if option 20.1 is used) for air interdiction ("AI") missions.

22.0 MULTI-PLAYER RULES

The larger scenarios lend themselves well to play by more than one player per side. The presence of more than one player per side allows some additional realism to be added to the game as coordination will necessarily not be as good as when one player runs everything. This option contains some *suggested* rules for use when there is more than one player per side.

22.1 ASSIGNING FORCES: Before a game begins, decide which players will control which forces. With two players on a side, one should control the air and air defense and one should control the other ground and helicopter units. With more than two players per side (best for the larger scenarios), there can be an overall commander trying to keep everybody pulling together and conforming to plans (and possibly also commanding some subordinate post to have a few units to actually command personally), individual division commanders to control major ground forces, air commanders that control only certain types of air units, etc. Players control *only* the units which they are assigned to command. No other player may move or handle dice rolls for that player's units.

22.2 PERSONAL HEADQUARTERS: Each ground commander should select one controlled headquarters unit (of the highest in the command hierarchy available) as a "personal" headquarters unit. A personal headquarters unit represents that player's location on the mapboard. Air commanders are assumed to have their own personal headquarters locations off the mapboard and do not select headquarters units. Personal headquarters units can be replaced by using option 13.1 to get the same unit back, or if 13.1 is not used, by waiting two Turns and then selecting another headquarters unit as a personal headquarters unit.

22.3 PLAYER COMMUNICATIONS: The players on a side should get together before a game starts to discuss strategy and to issue and receive orders. After a game starts they may only communicate with each other through their personal headquarters. Players may communicate with others on their side (talk to them, write notes, give orders, etc.) *only* if their personal headquarters units have not been eliminated. If a personal headquarters is eliminated, that player may not communicate in any way with any of the other players until the personal headquarters unit is replaced. Players may wish to limit the length of talks or the number of words in notes based on the disruption levels of personal headquarters units (i.e., the more disruption levels the shorter the messages).

23.0 THE UMPIRED GAME

There is no wargaming experience to equal playing an umpired game, especially with multi-players on each side. Suddenly, things that seem quite easy in two-player, face-to-face games become quite difficult. There is *real* command friction and "fog of war". Where is the enemy? Where are our friends? Has anybody heard from that force lately? The rules to *TAC AIR* so far have tried to keep players from taking full advantage of the plethora of military intelligence available from looking at the units on the mapboard. This option takes much of that information away and puts you in the shoes (combat boots?) of actual military commanders—forced to make critical decisions based on incomplete information.

This option requires the services of an extra person (or team, especially for large multi-player games) who is an expert on the game, but plays for neither side, serving instead as an "umpire" to process information and run the game. This rules section presents *suggestions* for umpires in running such games. Many other ideas will present themselves to imaginative umpires as they gain experience. It should be pointed out that serving as an umpire can be a surprisingly interesting and enjoyable experience.

23.1 GAME SETUP: The umpire selects the scenario, the month and sets up the mapboard units for *both* sides (try for some unusual positioning to present a real challenge or interesting situation). So the players can't just read a scenario in this Manual to obtain a complete enemy order of battle, it is suggested that the umpire make minor modifications in a selected scenario's orders of battle, entry locations and times, victory conditions (to reflect who was "helped" by the other changes), etc. An interesting variation is to secretly and separately inform the sides (or even individual players) of what they have to do to win so that no one (except the umpire) is quite sure what constitutes a "victory" until the game is over. The players not knowing the exact length of the game can also make things interesting.

23.1.1: Separate the players so that they are out of sight of each other. Each player or group of players needs a copy of the game and the umpire needs another copy. All copies are identical, except that only the umpire's copy shows all the units of both sides. The player's copies show only their own units plus any information about other units supplied by the umpire. Players may wish to use some blank counters on which they can write information about units whose exact identities are unknown.

23.1.2: This system works beautifully if all participants have their copies at separate phone stations and the game can be played by telephone.

23.2 UMPIRED "SPOTTING": The game is played normally, although all information is known by or comes through the umpire and the umpire can control the information going to the players to create a more realistic and uncertain atmosphere for the game. All units that a player does not directly control (including friendly ones) are considered to be "hidden" until "spotted" by a player's own units or (in multi-player games) information is supplied from others on the same side. Only the umpire knows all locations and unit identities. It is even possible for combats to be resolved between units where the players are not exactly sure what they are fighting. For umpired games, ignore the option 21.4 restrictions on hex selection for air units with "AI" orders—let the players use their collected spotting information to use as a basis for selecting any desired hexes. When any of a player's units spots something, assume that the information is passed on to all of his units, so they *all* have the information for use. Spotting (EXCEPTION: see 23.2.2.2) requires an unblocked line of sight. Umpires can modify this section to taste; the following guidelines are suggested as they give a fair degree of realism and are reasonably easy to implement. Units can be spotted in a number of ways and different information given to the players depending on how the spotting is done:

23.2.1 RADAR SPOTTING: Radar is useful for spotting anything that is "flying" (does not include helicopter units with their non-moving side up). Radar spotting reveals only if the spotted unit is an air or *moving* helicopter or airmobile unit,

the number of units, entire or half-flights (but *not* the number of disruption levels on helicopter units or the fact that air units are aborting), and an air unit's general mission—a close air support mission (but not its *exact* orders), an air combat mission, or an air unit carrying paratroopers (varying speeds, formations, typical altitudes and some very clever technological "tricks" usually make these distinctions possible). If desired (depending on the work load that the umpire can tolerate), an umpire can consistently or randomly roll a die for an air unit spotted on radar before giving the information to other players: "1-3" = give only the above information; "4-5" = not only give the above information, but also the *exact* type of air unit ("MiG-29", "RF-4", etc.); "6" = give the wrong information (i.e., identify an air combat mission air unit as a close air support mission air unit, halve or double the actual number of units, mistake a MiG-29 for a MiG-21, etc.).

23.2.1.1 OFF-BOARD RADARS: Assume that to the rear (off the mapboard), for both sides, there are ample ground and flying radar facilities to spot *all* (ignore lines of sight) air and moving helicopter units on the mapboard.

23.2.1.2 ON-BOARD RADARS: These rules are needed only in multi-player games for players whose personal headquarters unit is not currently present, thus preventing communication with other players and the off-board radar. Units equipped with search radars ("A" combat factor underlined) can spot air and moving helicopter units at any distance in any direction unless a line of sight is blocked. If you really want to go into detail, an air unit's radar should only be effective in a cone (similar to the one in the RADAR HOMING MISSILE FIRING CONE DIAGRAM but extending across the mapboard) from an air unit's front.

23.2.2 VISUAL SPOTTING: The "eyes have it" when it comes to obtaining detailed information.

23.2.2.1 VISUAL SPOTTING WITH AIR UNITS: Air units are looking for and are good at spotting anything else in the air. Air units are usually too busy and moving too fast to spot much on the ground and normally will not do so.

23.2.2.1.1: Air units visually spot any other air units or moving helicopter units whenever they get within 4 hexes range of them with an unblocked line of sight. All information about a spotted unit is reported except its designation, if it is an aborted air unit and, for helicopter units, its organization). Halve the range during night Turns or, for spotting other air units only, during cloud Turns.

23.2.2.1.2: An exception to not spotting ground units are air units with "AI" orders. These can spot only from their interdiction, Primary Target or Secondary Target hexes. All information (including which side is up) on ground and helicopter units that they would normally "see" to combat is reported except unit organization, designation and number of disruption levels). The other exception is for air units with "RF" orders. Report everything but organization, designation and number of disruption levels for all ground and helicopter units located in all of the hexes from which "information" is collected.

23.2.2.2 VISUAL SPOTTING WITH GROUND AND HELICOPTER UNITS: These units have lots of eyes available, but ground irregularities limit distances at which spotting is possible. More importantly, these units also have patrols or scouts operating around the major unit position, which extend their spotting abilities considerably and, because of which, lines of sight for spotting with these units are never considered to be blocked.

23.2.2.2.1: Any air or moving helicopter unit can be spotted by ground and helicopter units at a distance of up to 6 hexes (halved during night Turns if option 14.0 is used) and can differentiate all information except organization, designation, if an air unit is aborted or the disruption levels on a helicopter unit.

23.2.2.2.2: Any ground or non-moving helicopter unit, bridge (to see if it is standing or blown up), or obstruction marker can be spotted from a range of 12 hexes if it is moving or 6 hexes if it is non-moving (including bridges and obstruction markers). These ranges are halved if the unit being spotted is in a woods or urban hex and/or at night or in fog conditions. Ranges are doubled when spotting with cavalry/reconnaissance units (if ranges are both halved and doubled, they are normal). Everything but organization, unit designation and number of disruption levels is revealed. If adjacent to a ground or helicopter unit (moving or non-moving), all information including organization, unit designation and disruption levels is revealed (prisoners would reveal these final bits of information).

23.2.2.2.3: Minefields can be spotted only when a ground or helicopter unit is adjacent to it.

23.2.3 OTHER FORMS OF SPOTTING: Modern armies have a great variety of electronic equipment (radio triangulation, listening posts, etc.) to help them locate enemy units. This "spotting" is handled automatically by the umpire and revealed to everyone with a personal headquarters unit.

23.2.3.1: The locations of all signal units doing any ground "EC" (see option 15.1) or attempting to do so are revealed.

23.2.3.2: The locations of artillery units used for indirect fire combat or air defense units used for air defense combat is revealed. No further information other than location and the fact that it is an artillery or air defense unit need be revealed.

23.2.3.3: The locations of headquarters units are revealed if any of their commanded units moved during the Maneuver Phase. The type, organization, hierarchy, etc. of headquarters units is not revealed, just their locations.

23.3 GENERAL UMPIRE SUGGESTIONS:

The umpire has a lot to do, must be skilled with the rules, tactful and able to use imagination in many situations. After some experience in the role, umpires should be able to augment the "bare bones" suggestions here with diabolical ideas of their own, only those ideas will not be in this Manual for anyone to look up! Keeping the players guessing is part of the enjoyment of being an umpire.

23.3.1 DIE ROLLS: The umpire should handle all die rolls. Unless a unit is eliminated or spotting rules require it, there is no reason for the umpire to reveal the exact results of the combat to any player whose unit is not the one which is hit or missed.

23.3.2 COMMUNICATIONS: All communications should have to go through the umpire. If playing by phone, don't even let the players know who else is playing or, at least, what side the other players are on—this should keep communications behind the umpire's back to a minimum.

23.3.3 NOTES: Players and umpires should constantly be keeping notes on information they should be passing on to one another the next time they communicate.

23.3.4 STREAMLINED UMPIRED SEQUENCE OF PLAY: To reduce the need for excessive back and forth communications, the following modifications to the normal face-to-face Sequence of Play are recommended for umpired games:

23.3.4.1 INITIATIVE, WEATHER AND PREPARATION PHASE: The umpire performs the needed die rolls for the first two phases and (unless the players can be watched) for all disruption removals and reports the results to the players, as well as reporting about last Turn's Signal Phase and updating the players on spottings since their last contact. The players then perform the remainder of their Preparation Phases simultaneously (keeping notes as they go) and report back on what they have done to the umpire. This phase is expanded to the extent that the players should also give some general orders or "doctrine" (the umpire will interpret, so players should try to be clear and concise) on the use of their air defense units and what units they plan to support with indirect artillery fire (either directly on the units in maneuver combats or with counterbattery, etc.).

23.3.4.2 MANEUVER PHASE: The sides perform this in the normal order (first side, then second side) with their Ground/Helicopter Check Steps, reporting their moves, how maneuver combats are divided and any indirect fire combats to the umpire. As each player reveals his moves to the umpire, the umpire should update that player on spotting, etc. and update his own mapboard to show the new unit locations. To keep from constantly recontacting the players everytime an air defense combat or indirect fire combat for the non-phasing side is performed, the umpire handles all the decisions and dice rolls for these, using his own best judgement and random die rolls to aid in decision making (see option 24.0 for ideas on using dice to make decisions) and decides when and how to implement these, based on the players' general instructions. The umpire also handles all die rolls to resolve the maneuver combats.

23.3.4.3 AIR AND SIGNAL PHASES: Perform the Air Rounds in the normal order, handling situations that arise as in the Maneuver Phase. Also, during the last Air Round, both sides should tell the umpire what they plan to do during the Signal Phase and (in multi-player games) pass on to the umpire any communications for the other players on their side.

23.3.4.4 TURN RECORD AND VICTORY DETERMINATION PHASES: Umpire handles officially, but everybody can record the current time and make their own estimates on who is winning.

23.3.5 DIVINE RIGHT OF UMPIRES: From time to time, player's mapboards may show units differently than they appear on the umpire's mapboard or any other differences of opinion can arise. In all cases of conflict, the umpire is *always* right!

24.0 PLAYING SOLITAIRE

Like most two-player games, *TAC AIR* can be solitaire by the simple expedient of alternately playing both sides to the best of one's ability. Although this calls for a bit of a "split personality", it can be done, and is an interesting way to learn the rules or experiment with various strategies. The following are suggestions for making solitaire play more interesting:

24.1 SOLITAIRE DECISIONS: Whenever a decision regarding two or more ideas or plans of roughly equal merit is required, keep the various possibilities in mind, then roll a die to randomly decide which option to use. *For example, in a situation where an artillery unit could be equally usefully employed for indirect fire against an attacking unit, for counterbattery or not used and saved for a later combat, use a die roll to make the decision. Die rolls can decide if air defense units should be used immediately or wait for a combined combat when (if?) the enemy moves closer, or used against helicopters (risking depletion) or saved to use against air units.*

24.2 SOLITAIRE AIR ALLOCATION: Decisions made during Air Allocation Phases regarding how and when air units are used represent some of the most important choices made in a game. Some decisions are obvious, and would be made in an identical manner by any competent player. Others are less clear, and for those, let dice rolls make some of the decisions:

24.2.1 AVAILABILITY OF AIR UNITS: Let the dice decide which air units in the "Ready" box should be advanced into the "Mission Boxes". Assign numbers for these rolls based on assessments of the current situation. *For example, let a die roll of "1-4" move an air unit into the "Mission Boxes" on an "average" Turn, while a "1-5" does so on a Turn that calls for a maximum air effort, etc.*

24.2.2 MISSION ASSIGNMENT: Once an air unit has been shifted out of the "Ready" box, it must be assigned to a specific "Mission Box". Competent play makes some decisions almost automatic, but others are less clear. Generally speaking, comparing combat factors on the air units, those with larger "A" factors should always be assigned to "AC" missions, while those with larger "B" factors should always be assigned to "CAS" missions. For air units like the F-16 with equal combat factors, let the dice determine each unit's mission.

24.2.3 STACKING: Within each "Mission Box", decisions must be made to stack units or not. Air units whose most important combat factor ("A" factor for "AC" missions and "B" factor for "CAS" missions) is "2" or less, should generally be stacked together to provide an effective total combat factor. Air units whose most important combat factor is "3" or more may be stacked together (to deal with high value opponents), sent out alone or stacked with or as an "escort"—let dice rolls decide which.

24.2.4 "CAS" MISSION ORDERS: Once air units are divided into general missions and stacks, except where orders are obvious (ie., giving RF-4 air units "RF" orders), use dice rolls to decide on "CAS" mission orders for each unit or stack. The die rolls required for each order can be "skewed" by the player, depending on his view of the current situation. *For example, does it look like more "DAS" or "AI" orders are needed this Turn, etc.* Once orders are decided, there are still more decisions. Whenever conditions don't dictate an automatic "best" choice, choose and record a number of alternate and plausible forward air controller units for "DAS" order units and/or alternate interdiction (or flight plans with Primary and Secondary Target) hexes for "AI" order units. Use the dice to decide which alternatives to use only after completing the Maneuver Phase—this keeps a solitaire player from making too free use of his "inside information" to use the Maneuver Phase to prepare for the Air Phase.

GAME INFORMATION

GENERAL HINTS ON PLAY:

An absolutely basic guideline to play is to *read the victory conditions* for the scenario being played. No matter how well you do, if the objectives stated in the victory conditions are not achieved, you will lose.

Keep in mind that your style of play will differ radically, depending on whether you need to advance across the mapboard or keep your opponent from doing so. An attacker needs to eliminate enemy ground and helicopter units to permit a rapid advance, while a defender can seriously delay an offensive by disrupting all or most of the enemy ground and helicopter units. Analyze your strengths and weaknesses and those of your opponent in the scenario. What have you learned from previous experience? What do you need to do to win?

You cannot win without integrating together all the components of combined arms, each part with its own capabilities and limitations in the on-going air-land battle. Use the "support" forces (artillery and air) wisely. Although only one maneuver combat attack per Turn can be made on enemy ground and helicopter units, combining that attack with an indirect fire combat and *repeated* (if necessary) air support combats is the only way to be sure that the enemy will be seriously disrupted or eliminated. You need a coherent and effective strategy for using those components that will move you towards achieving the victory conditions. Where should you make your main effort? Where is the enemy's main effort? Do you have (or need) decent security in secondary sectors? You need to plan ahead and think through the consequences of your plans.

Keep a reserve! In this game, you can never be sure what is going to happen until it happens. Combat can leave key ground and helicopter units unable to move or attack and/or can eliminate their zones of control. Extra units to exploit opportunities, to keep an offensive drive going or to shore up a sagging defense line are insurance against nasty surprises.

Who is providing protection from enemy air-power in each sector of the mapboard? If it is air defense units, better make sure they are moved forward and in position to do so. If it is air control mission air units, better be sure there are enough of them available to be effective every Turn (remembering that air units are, at best, available only every other Turn).

Should most of your airpower fly air control missions to attempt to destroy the opposing air forces? The more air units with air control missions, the more enemy air units they will probably destroy, but this is also that many fewer friendly air units with close air support missions available to pound on the enemy ground units. Will using airpower to directly attack the enemy front line units or going after their supply and headquarters units be the most effective method of driving back or stopping the enemy ground forces? Various strategies can work, but all take some time. Is the time available for a specific plan to work? Stopping an enemy advance *after* it has reached the objective or killing the last enemy unit in your way but not reaching the needed geographical objectives will not win games.

Are your engineers where they are needed? Is your artillery properly placed to support your front lines? There are many considerations that need to be taken into account to cause a "breakthrough" and then follow it up with a deep penetration (or to prevent same). Good luck and watch for articles on *TAC AIR* in the Avalon Hill *GENERAL* magazine.

Look for articles and more die-cut counters for *TAC AIR* in the Avalon Hill *GENERAL*, Vol. 25, #2.

DESIGNER PROFILE: *TAC AIR* was designed by United States Air Force Major Gary C. Morgan to depict modern air-land battle, complete with integrated air defense systems, detailed air mission planning and Airspace Control considerations. Major Morgan's first design for The Avalon Hill Game Company was the air-to-air combat game *FLIGHT LEADER*. Both of these games were first produced by the United States Air Force for training under "Project Warrior" (*FLIGHT LEADER* was originally titled *CHECK SIX!* and *TAC AIR* was originally titled *FEBA*). Major Morgan's military career dates back to 1974 with over 1,000 flying hours in the F-4D/E/G models of the McDonnell Douglas Phantom II. He is an avid student of military history and has an extensive collection of wargames and books.

CREDITS

DESIGN AND RESEARCH: Gary C. Morgan.

ORIGINAL DEVELOPMENT: Major Mark Thibodeau, Captain Matt Caffrey and Captain Wayne Close.

AVALON HILL DEVELOPMENT AND RULES: S. Craig Taylor, Jr.

PRODUCTION COORDINATION: Thomas N. Shaw.

PREP DEPARTMENT COORDINATOR: Elaine Adkins.

TYPESETTING: Colonial Composition.

BOX ART: George Parrish.

MAPBOARD ART/GRAPHICS/PASTEUP: Charles Kibler.

PLAYTESTERS: Special thanks to the Nellis Wargames Club, Robert Coggins, Don Greenwood, James Henson, Rex Martin, Bob McNamara and George Petronis.

THE GENERAL

Now that you know how to play the game, the next problem is probably *who* to play it with and how to *win*. We can help you with that problem, and many others, through your subscription to our bi-monthly gaming journal, *The GENERAL*. In *The GENERAL* you'll not only read all there is to know about this game, but will also learn about our dozens of other exciting simulation games of skill. Every full-color, issue is crammed full of the best articles on the strategy and tactics of the games from The Avalon Hill Game Company. Just look at what *The GENERAL* offers:

Advertising: Our **OPONENTS WANTED COLUMN** allows you to advertise, for a minimal fee, for opponents, discontinued games or competition of any sort. Each issue contains dozens of ads which are seen by our many readers worldwide. The fastest way to find an opponent for this game, whether it is across the street or across the Atlantic Ocean, is in the pages of *The GENERAL*.

Contests: In every issue, we pose challenging game situations which you can enter to win free games by utilizing your playing skills for this or any of The Avalon Hill Game Company's many other simulations.

Tactics & Strategy: Learn why you lose or how to win. The nation's best players and our design staff members write many thought-provoking articles on the entire gamut of games by The Avalon Hill Game Company. Many issues contain a **SERIES REPLAY** in which an actual move-by-move game by master players, profusely illustrated and with commentary by a recognized expert, is printed.

History: Curious why one side always seems to win? Each issue contains historical material to enhance your enjoyment of the game situation.

Game Design: Wonder why this game was designed the way it was? Read *The GENERAL* and find out! Our regular **DESIGN ANALYSIS** column features explanatory treatises by our designers and playtesters.

Variants: Tired of the same old game? Playtested variant rules and scenarios by dedicated experts for this game, and dozens of others, are printed regularly in *The GENERAL*. These bring many more hours of enjoyment, and often serve to highlight the finer points of strategy and tactics.

Questions Answered: In our **QUESTION BOX** in each issue, you'll find the only official source of rules interpretations and changes for this and our other games.

Product Reviews: Interested in other titles from The Avalon Hill Game Company? Check them out in the **READER'S BUYERS GUIDE**. The RBG is a game review compiled by our subscribers at large – the people who play the games – not a self-appointed critic. Realism, complexity, components, play-balance and game time are only a few of the categories rated in the RBG.

What's Happening: Most gamers like to know what's going on in the gaming hobby. Each issue contains an installment of **AH PHILOSOPHY** where we discuss developments in the industry and hobby, and generally strive to keep you informed. Full-page ads announce new titles from The Avalon Hill Game Company. In addition, the **INFILTRATOR'S REPORT** keeps you abreast on tournaments, conventions, club news, awards and unusual happenings.

Value: In every issue you'll find a value coupon to be applied against the cost of postage when purchasing games directly from The Avalon Hill Game Company.

Since its inception in 1964, *The GENERAL* has stood the test of time. It remains the oldest and most-respected periodical devoted to simulation gaming on the market. And its subscription rates remain the best value. Increase your enjoyment of this and the entire line of games from The Avalon Hill Game Company many-fold with a subscription. If you're convinced, send your check for a two-year subscription. See the **PARTS LIST** enclosed with your new game for prices.

THE SCENARIOS

The scenarios in these sections provide representative types of actions that could be expected in a modern European war. Each scenario is, in effect, a separate game and provides the specific information needed play. All scenarios may be used with the Advanced Game Rules and desired Optional Rules.

25.0 SCENARIO FORMAT

25.0 FORCE COMPOSITIONS: Each side is assigned a number of points used to buy units for the scenario. When selecting forces, note that the cost for supply units are included in the HQ units. The point cost of a unit is the sum of the A & B factors on the units' moving' side, or A+B+C for air units.

25.1 FIRST SIDE: This gives the side which will be the "first side" (see 4.1.3) during the scenario.

25.2 MAPBOARD: This tells which mapboard section or sections are used for the game and the designated entry/exit mapboard edges for both sides' air (see 4.7) and replacement (see option 13.0) units.

25.3 DEPLOYMENT: Except for the final scenario, only a fraction of the units included in the game are required to play any given scenario. This tells the exact units required by both sides for the specific scenario and any limitations on their placement. In Scenario One through Scenario Five, if using only the Basic Game Rules, do *not* use any of the listed headquarters, artillery, engineer or supply units. In all scenarios, if optional rules 15.1 and/or 17.0, are not used, the units associated with them should also not be used. *For example, if option 15.1 is not used, no signal units are used.*

25.3.1 ORDER LISTED: The first side listed must setup *all* of its forces first, followed by the setup of all of the other side's forces.

25.3.2 GROUND UNIT SETUP INFORMATION: The deployment information designates the ground forces to be used and where they are to be placed as follows:

2nd Armored Cavalry Regiment (All): (U.S. red square) Place within 9 hexes of Q15, except not in East German hexes.

Organization Name: 2nd Armored Cavalry Regiment (All)
 Organization Modifier: (All)
 Organization Symbol: Red square
 Unit Location(s): Within 9 hexes of Q15, except not in East German hexes

25.3.2.1 ORGANIZATION NAME: This is the name of an organization being used for the scenario. The unit counters that compose a given organization are shown on the Organization Cards.

25.3.2.2 ORGANIZATION MODIFIER: This indicates how many of the organization's unit counters are used, as follows:

(All)=All of the unit counters shown for the organization on its Organization Card are used.
 (-)=Some of the organization's unit counters as shown on its Organization Card are *not* used. In this case, only the unit counters pictured in the scenario are used.

25.3.2.3 ORGANIZATION SYMBOL: For ease in finding the necessary unit counters, a description of the organization symbol found on all of the unit counters is given.

25.3.2.4 UNIT LOCATION(S): This tells where the unit counters are placed, as follows:

25.3.2.4.1: If only a specific hex identification is given for a unit, that unit must be placed in exactly that hex.

25.3.2.4.2: If a hex distance and a hex identification is given, the unit counters can be placed in or within the specific given range of that hex. *For example, in the above sample, the units can be placed as the controlling player desires in hex Q15 and/or in any hexes that are nine or less hexes range from hex Q15 (in this particular case, there is also a requirement that such hexes not be located in East Germany).*

25.3.2.4.3: If a direction and a hex row number or letter identification is given, the unit counters can be placed in that given area. *For example, units that can be placed south of row 15 can be placed in any hexes that contain an identification number of 16 or higher. Units that can be placed north of row 15 can be placed in any hexes that contain an identification number of 14 or less.*

25.3.2.4.4: If a hex identification, a choice of hex identifications or a mapboard edge is given with a Turn number, the unit counters start the game off the mapboard and enter the mapboard at the designated hex (or choice of hexes) on the Turn and/or any later Turn given. The hex where a unit enters the mapboard counts as the first hex moved into for each of the unit counters.

25.3.3 AIR SUPPORT UNIT SETUP INFORMATION: Air units are always initially placed in the appropriate "Ready" boxes of the AIR UNIT PLAY AIDS TRACKS on their side's Player Card. The deployment information designates the air units to be used.

USAFE Air Support: 2×F-16 (13-14), 2×A-10 (19-20).

Air Organization Name: USAFE Air Support
 Unit Names: F-16, A-10
 Number of Units: 2, 2
 Unit Designation Numbers: 13-14, 19-20

25.3.3.1 AIR ORGANIZATION NAME: Simply tells how the air units are commanded. This is for player information only, and plays no part in the game.

25.3.3.2 NUMBER OF UNITS AND UNIT NAME: This tells the number of air units of a type to be used. *For example, 2×A-10 means that two of the A-10 air units are used.*

25.3.3.3 UNIT DESIGNATION NUMBERS: These are the air units' designation numbers for use in finding the necessary units for a game.

25.3.4 OTHER: This is included only if necessary. The presence of minefields (option 18.1), blown bridges or obstructions (option 18.2) that are in place when the game starts are noted, as well as the availability of NBC weapons (option 16.0).

25.4 VICTORY CONDITIONS: Study the victory conditions carefully and fight accordingly! This section gives the length of the game, tells how to gain victory points, and reveals how a winner and the level of victory is determined based on the number of victory points gained. The meanings of the various victory levels are as follows:

Decisive Victory: A side winning a decisive victory has thoroughly defeated the enemy.

Tactical Victory: A side winning a tactical victory has done well, but the enemy has not been beaten beyond recovery.

Draw: A tie. No result and no winner.

25.5 SPECIAL RULES: This is included only if necessary. Any rules or information that applies only to that scenario are given.

26.0 INTRODUCTORY SCENARIOS

These short scenarios (typical playing times 2 to 3 hours) cover small actions along only a portion of the front and are designed to be played using the Advanced Game Rules (with any desired options). If desired, these scenarios can also be played using only the Basic Game Rules by not using any of the listed headquarters, artillery, engineer or supply units and adding Advanced Game rule 12.0. (Scenario One is actually a variant of the Basic Game Scenario given in 2.0). Players are encouraged to play a number of these scenarios to thoroughly familiarize themselves with the game mechanics before moving on to the larger scenarios in sections 27.0 and 28.0.



26.1.3 FORCE COMPOSITIONS (WP / NATO)

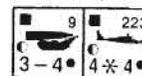
Air Units 36 / 44
 Artillery 36 / 44
 Ground 36 / 44
 Air Defense 36 / 44

26.1.2 MAPBOARD: Use only mapboard section "A". Enter/exit is south and west edges for NATO and north edge for PACT.

26.1.3 DEPLOYMENT:

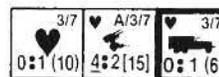
NATO: Place all ground and helicopter units within 9 hexes of Q15, except not in East German hexes or hexes containing border hexsides.

VII Corps Assets (-): (U.S. black square).



2nd Armored Cavalry Regiment (All): (U.S. red square).

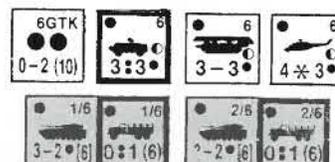
3/7 Air Defense Artillery Battalion (-): (U.S. red heart).



USAFE Air Support: 2×F-16 (13-14), 2×A-10 (19-20).

PACT: Place all ground and helicopter units in any East German hexes that are north of hex row 9.

6th Guards Tank Division Assets (-): (black circle).



22nd Guards Motorized Rifle Regiment (All): (white circle).

51st Guards Tank Regiment (All): (red circle).
Tactical Air Army Support: 2×MiG-29 (10-11), 2 Su-25 (22-23).

26.1.4 VICTORY CONDITIONS: The game lasts 8 Turns. The PACT side gets 1 victory point per Soviet armored, infantry, reconnaissance or helicopter unit that enters or passes through hex T22 at least once during the game and 1 victory point per NATO ground and helicopter unit eliminated in excess of the number of PACT ground and helicopter units eliminated (if PACT losses exceed NATO losses, this counts as "0" PACT victory points).

NATO Decisive Victory: 0–1 PACT victory points.
 NATO Tactical Victory: 2 PACT victory point.
 Draw (No Winner) : 3 PACT victory points.
 PACT Tactical Victory : 4 PACT victory points.
 PACT Decisive Victory : 5 or more PACT victory points.



26.2 SCENARIO TWO—"Meeting Engagement": The West German 36th Panzer Brigade meets the Soviet 52nd Guards Tank Regiment in a head-on tank battle reminiscent of the Eastern Front in World War II.

26.2.1 FIRST SIDE: PACT.

26.2.2 MAPBOARD: Use only mapboard section "B". Enter/exit is south edge for NATO and north edge for PACT.

26.2.3 DEPLOYMENT:
NATO:

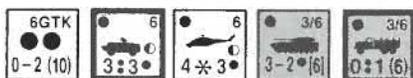
12th Panzer Division Assets (-) (German black circle) Place in UU22.



36th Panzer Brigade (All): (German blue circle) Place within 2 hexes of WW23.
Luftwaffe Air Support: 2×Torn (37-38).

PACT:

6th Guards Tank Division Assets (-) (black circle) Place in specific hexes.



SS12 RR16 SS13 TT11 SS11

52nd Guards Tank Regiment (All): (blue circle) Place within 2 hexes of RR14.

6th SAM Regiment (-) (light blue circle) Place within 1 hex of OO15.



Tactical Air Army Support: 2×Su-25 (22-23).

26.2.4 VICTORY CONDITIONS: The game lasts 8 Turns. The PACT side gets 1 victory point per Soviet armored, helicopter or reconnaissance

unit that ends the game in a Bayreuth hex and the NATO player gets 1 victory point per German armored, infantry or reconnaissance unit that ends the game in a Kulmbach hex. Both sides also get 1 victory point per enemy ground or helicopter unit eliminated. After counting the victory points, subtract the smaller total from the larger.

NATO Decisive Victory: +3 or more NATO victory points.
 NATO Tactical Victory : +2 NATO victory point.
 Draw (No Winner) : +1 NATO to +1 PACT victory points.
 PACT Tactical Victory : +2 PACT victory points.
 PACT Decisive Victory : +3 or more PACT victory points.



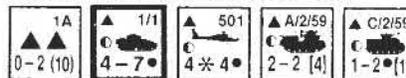
26.3 SCENARIO THREE—"Advance To Contact": The 2nd Brigade of the U.S. 1st Armored Division encounters elements of the Soviet 51st Tank Division.

26.3.1 FIRST SIDE: PACT.

26.3.2 MAPBOARD: Use only mapboard section "A". Enter/exit is south edge for NATO and north edge for PACT.

26.3.3 DEPLOYMENT:
NATO:

1st Armored Division Assets (-) (U.S. black triangle) Place within 5 hexes of U26.

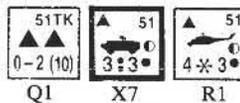


2nd Brigade/1st Armored (All): (U.S. blue triangle) Place within 2 hexes of U26.

USAFE Air Support: 2×F-16 (13-14).

PACT:

51st Tank Division Assets (-) (black triangle) Place in specific hexes.



Q1 X7 R1

154th Tank Regiment (All): (red triangle) Place within 2 hexes of M6.

156th Tank Regiment (All): (blue triangle) Enters at W1 on Turn 1.

Tactical Air Army Support: 2×MiG-27 (7-8).

26.3.4 VICTORY CONDITIONS: The game lasts 12 Turns. Both sides get 1 victory point per enemy armored or infantry unit eliminated. The PACT side also gets 1 victory point per Soviet armored unit that ends the game in a Bamberg hex. After counting up the victory points, subtract the smaller total from the larger.

NATO Decisive Victory: +3 or more NATO victory points
 NATO Tactical Victory : +2 NATO victory point.
 Draw (No Winner) : +1 NATO to +2 PACT victory points.
 PACT Tactical Victory : +3 PACT victory points.
 PACT Decisive Victory : +4 or more PACT victory points.

26.3.5 SPEICAL RULES: Option 19.3 may not be used during the first two Turns of the game.



26.4 SCENARIO FOUR—"Hasty Attack": The West German 10th Panzergrenadier Brigade faces a hasty attack by elements of the Soviet 18th Guards Motorized Rifle Division.

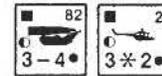
26.4.1 FIRST SIDE: PACT.

26.4.2 MAPBOARD: Use only mapboard section "B". Enter/exit is south edge for NATO and south edge for PACT.

26.4.3 DEPLOYMENT:

NATO:

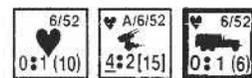
VII Corps Assets (-) (black square). Place within 1 hex of WW16.



4th Jager Division Assets (All): (German black triangle) Place within 1 hex of WW15.

10th Panzergrenadier Brigade (All): (German red triangle) Place within 4 hexes of RR14.

6/52 Air Defense Artillery Battalion (-) (U.S. blue heart) Place in specific hexes.



XX16 WW14 XX14

Luftwaffe Air Support: 2×Torn (37-38), 2×Alpha (39-40).

PACT:

18th Guards Motorized Rifle Division Assets (-) (black diamond) Place in specific hexes.



HH2 GG7 GG6 JJ9

18th Guards Tank Regiment (All): (white diamond) Place within 2 hexes of HH7.

51st Guards Motorized Rifle Regiment (All): (red diamond) Place within 2 hexes of GG12.

53rd Guards Motorized Rifle Regiment (All): (blue diamond) Place within 2 hexes of LL7.

Tactical Air Army Support: 2×MiG-27 (7-8), 2×Su-25 (22-23).

26.4.4 VICTORY CONDITIONS: The game lasts 12 Turns. The PACT side gets 1 victory point per NATO armored or infantry unit eliminated and 1 victory point per Soviet armored or infantry unit that enters or passes through hex XX23 at least once during the game.

NATO Decisive Victory: 0 PACT victory points.
 NATO Tactical Victory : 1 PACT victory point.
 Draw (No Winner) : 2 PACT victory points.
 PACT Tactical Victory : 3 PACT victory points.
 PACT Decisive Victory : 4 or more PACT victory points.



26.5 SCENARIO FIVE—"Deliberate Attack": Two brigades of the U.S. 3rd Mechanized Division defend against the attacking Soviet 51st Tank Division.

26.5.1 FIRST SIDE: PACT.

26.5.2 MAPBOARD: Use only mapboard section "A". Enter/exit is south edge for NATO and north edge for PACT.

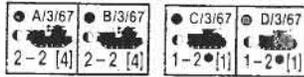
26.5.3 DEPLOYMENT:

NATO: Place *all* ground and helicopter units south of hex row 12.

VII Corps Assets (-): (U.S. black square).



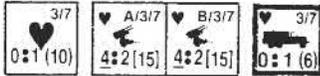
3rd Mechanized Division Assets (-): (U.S. black circle).



1st Brigade/3rd Mechanized Division (All): (U.S. red circle).

2nd Brigade/3rd Mechanized Division (All): (U.S. blue circle).

3/7 Air Defense Artillery Battalion (-): (U.S. red heart).



USAFE Air Support: 2 x F-15 (1-2), 4 x A-10 (17-22), 2 x F-16 (13-14).

PACT: Place *all* ground and helicopter units north of hex row 9.

Central Group of Forces Assets (-): (black square).



51st Tank Division (All): (triangle).

Tactical Air Army Support: 3 x Mig-27 (7-9), 3 x Su-17 (16-18), 2 x Su-24, 3 x Su-25 (22-24).

26.5.4 VICTORY CONDITIONS: The game lasts 16 Turns. The PACT side gets 1 victory point per NATO armored or infantry unit eliminated and 1 victory point per Soviet armored or infantry unit that enters or passes through hex T25 at least once during the game. From this total, subtract 1 victory point per Soviet ground and helicopter unit eliminated.

NATO Decisive Victory: 0 or less PACT victory points.
 NATO Tactical Victory: 1-2 PACT victory points.
 Draw (No Winner): 3 PACT victory points.
 PACT Tactical Victory: 4-5 PACT victory points.
 PACT Decisive Victory: 6 or more PACT victory points.

27.0 TOURNAMENT SCENARIOS

These scenarios are larger and longer than the Introductory Scenarios and are *not* balanced for play using only the Basic Game Rules. Command and supply can play a large role in these scenarios. These scenarios are suggested for experienced players of the Advanced Game.



27.1 SCENARIO SIX—"Reconnaissance In Force": The Soviet 51st Tank Division, acting as an independent Operational Maneuver Group (OMG), penetrates NATO lines and runs into the West German 12th Panzer Division.

27.1.1 FIRST SIDE: PACT.

27.1.2 MAPBOARD: Use only mapboard section "B". Enter/exit is south edge for NATO and north edge and east edge from north of hex DDD15 for PACT.

27.1.3 FORCE COMPOSITIONS (WP / NATO):

Air Units **70 / 80** Artillery **20 / 30**
 Ground/Helo **120 / 100** Air Defense **50 / 40**
 Stand-Off Weapons = 2 air points per salvo
 Destroyed bridges = 2 free south of row 11; 2 ground points otherwise.

Reduce overall point cost for a formation by 5 points for each turn it is delayed entering the board.

Each command HQ includes applicable supply units for free.

WG Units may deploy one formation each within 5 hexes of PP-24 or within 3 hexes of WW-23. All other NATO units deploy south of row 18.

Soviet units may deploy one formation each within 3 hexes of LL-7 and 3 hexes of FF-4. Otherwise, ground units enter from KK-1 or HH-1

27.1.4 VICTORY CONDITIONS: The game lasts 16 Turns. The PACT side gets 1 victory point per Soviet armored, infantry and reconnaissance unit that is located south of hex row 25 at the end of the game.

NATO Decisive Victory: 0 PACT victory points.
 NATO Tactical Victory: 1 to 2 PACT victory points.
 Draw (No Winner): 3 PACT victory points.
 PACT Tactical Victory: 4 to 5 PACT victory points.
 PACT Decisive Victory: 6 or more PACT victory points.



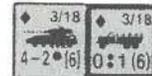
27.2 SCENARIO SEVEN—"Counterattack": The U.S. 1st Armored Division, after being pulled off the line and refitted, counterattacks the badly mauled Soviet 18th Guards Motorized Division.

27.2.1 FIRST SIDE: NATO.

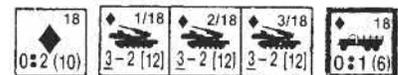
27.2.2 MAPBOARD: Use only mapboard section "A". Enter/exit is south edge and west edge from south of hex B15 for NATO and north edge for PACT.

PACT:

18th Guards Motorized Rifle Division Assets (-): (black diamond) Place north of hex row 10.



18th SAM Regiment (-): (light blue diamond) Place north of hex row 10.



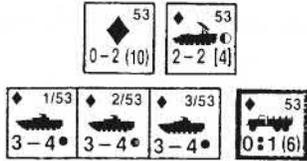
18th Guards Tank Regiment (-): (white diamond) Place within 2 hexes of G10.



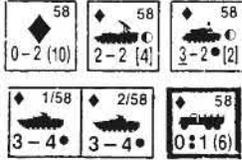
51st Guards Motorized Rifle Regiment (-): (red diamond) Place within 2 hexes of M11.



53rd Guards Motorized Rifle Regiment (-): (blue diamond) Place within 3 hexes of T11.



58th Guards Motorized Rifle Regiment (-): (green diamond) Place within 3 hexes of Z11.



Tactical Air Army Support: 2×MiG-21 (1-2), 3×MiG-23 (4-6), 3×MiG-27 (7-9), 2×MiG-29 (10-11), 2×Su-24 (19-20), 2×Su-25 (22-23).

Other: If desired, mark 1 blown up bridge anywhere north of hexrow 14.

27.2.3 DEPLOYMENT:

NATO:

VII Corps Assets (-): (U.S. black square). Place south of hex row 23.



210th Artillery Group (All): (U.S. blue square) Place south of hex row 23.

1st Armored Division Assets (All): (U.S. black triangle) Place south of hex row 18.

1st Brigade/1st Armored Division (All): (U.S. red triangle) Place within 3 hexes of L20.

2nd Brigade/1st Armored Division (All): (U.S. blue triangle) Enters at B19 on Turn 2.

3rd Brigade/1st Armored Division (All): (U.S. green triangle) Place within 3 hexes of T22.

3/7 Air Defense Artillery Battalion (All): (U.S. red heart) Place south of hex row 23.

2/57 Air Defense Artillery Battalion (All): (U.S. green heart) Place south of hex row 18.

USAFE Air Support: 4×F-15 (1-4), 4×F4G (7-10), 6×F-16 (13-18), 6×A-10 (19-24), 2×F-111 (27-28).

Other: If desired, mark 1 blown up bridge anywhere south of hexrow 15.

27.2.4 VICTORY CONDITIONS: The game lasts 16 Turns. Both sides get 1 victory point per enemy armored or infantry unit eliminated and 1 victory point per American armored or infantry unit that has exited from the mapboard at J1 and/or W1 by the end of the game. After counting the victory points, subtract the smaller total from the larger.

NATO Decisive Victory : +5 or more NATO victory points.
 NATO Tactical Victory : +4 NATO victory point.
 Draw (No Winner) : +3 NATO victory points.
 PACT Tactical Victory : +1 or +2 victory points.
 PACT Decisive Victory : 0 or any PACT victory points.



27.3 SCENARIO EIGHT—"Delaying Action": The West German 4th Jager Division attempts to slow the advance of the Soviet 6th Guards Tank Division.

27.3.1 FIRST SIDE: PACT.

27.3.2 MAPBOARD: Use only mapboard section "B". Enter/exit is south edge for NATO and north edge and east edge from north of hex DDD15 for PACT.

27.3.3 DEPLOYMENT:

NATO:

2/57 Air Defense Artillery Battalion (All): (U.S. green heart) Place south of hex row 20.

210th Artillery Group (All): (U.S. blue square) Place south of hex row 20.

4th Jager Division Assets (All): (German black triangle) Place within 2 hexes of KK24.

10th Panzergrenadier Brigade (All): (German red triangle) Place south of hex row 13 and west of hex row KK.

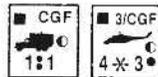
35th Panzergrenadier Brigade (All): (German red circle) Place south of hex row 13 and east of hex row KK.

4th ATAF Air Support: 2×F4G (7-8), 6×A-10 (19-24), 4×F4F (33-36), 2×Torn (37-38), 4×CF-18 (47-50).

Other: If desired, mark 2 blown up bridges, 1 minefield and 2 obstructions anywhere south of hexrow 12.

PACT:

Central Group of Forces Assets (-): (black square) Place north of hex row 5.



6th Guards Tank Division Assets (All): (black circle) Place north of hex row 10.

6th SAM Regiment (All): (light blue circle). Place north of hex row 5.

22nd Guards Motorized Rifle Regiment (All): (white circle) Place north of hex row 11 and south of hex row 8.

51st Guards Tank Regiment (All): (red circle) Place within 3 hexes of FF5.

52nd Guards Tank Regiment (All): (blue circle) Place within 3 hexes of KK5.

53rd Guards Tank Regiment (All): (green circle) Place within 3 hexes of OO6.

27th Guards Artillery Regiment (All): (blue star) Enters at FF1 on Turn 2.

3rd SAM Brigade Assets (-): (black heart) Enters at KK1 on Turn 3.



31st SAM Battalion (All): (red heart) Enters at KK1 on Turn 3.

Tactical Air Army Support: 2×MiG-23 (4-5), 3×MiG-27 (7-9), 3×MiG-29 (10-12), 3×Su-17, 3×Su-25 (22-24).

27.3.4 VICTORY CONDITIONS: The game lasts 24 Turns. The PACT side gets 1 victory point per Soviet armored or infantry unit that has exited the mapboard at hexes QQ34, TT34 and/or VV33 by the end of the game.

NATO Decisive Victory : 0 PACT victory points.
 NATO Tactical Victory : 1 PACT victory point.
 Draw (No Winner) : 2 PACT victory points.
 PACT Tactical Victory : 3 PACT victory points.
 PACT Decisive Victory : 4 or more PACT victory points.



"The Third Herd"



27.4 SCENARIO NINE—"Stalemate": The U.S. 3rd Mechanized Division and Soviet 18th Guards Motorized Rifle Division pound away at each other.

27.4.1 FIRST SIDE: PACT.

27.4.2 MAPBOARD: Use only mapboard section "A". Enter/exit is south edge and west edge from south of hex B18 for NATO and north edge for PACT.

27.4.3 DEPLOYMENT:

NATO:

3/7 Air Defense Artillery Battalion (All): (U.S. red heart) Place south of hex row 17.

6/52 Air Defense Artillery Battalion (All): (U.S. blue heart) Place south of hex row 22.

72nd Artillery Group (All): (U.S. green square) Place south of hex row 22.

2nd Armored Cavalry Regiment (All): (U.S. red square) Place south of hex row 17 and west of hex row L.

3rd Mechanized Division Assets (All): (U.S. black circle) Place south of hex row 22.

1st Brigade/3rd Mechanized Division (All): (U.S. red circle) Place south of hex row 17 and east of hex row U.

2nd Brigade/3rd Mechanized Division (All): (U.S. blue circle) Place south of hex row 17 and between hex rows M and T.

3rd Brigade/3rd Mechanized Division (All): (U.S. green circle) Place south of hex row 22.

4th ATAF Air Support: 4×F-15 (1-4), 2×F4G (7-8), 4×F-16 (13-16), 4×A-10 (19-22), 2×F-111 (27-28), 2×CF-18 (47-48).

Other: If desired, mark 1 blown up bridge anywhere south of hexrow 20.

PACT:

18th Guards Motorized Rifle Division Assets (All): (black diamond) Place north of hex row 12.

18th SAM Regiment (All): (light blue diamond) Place north of hex row 12.

18th Guards Tank Regiment (All): (white diamond) Place north of hex row 10.

51st Guards Motorized Rifle Regiment (All): (red diamond) Place north of hex row 18 and east of hex row U.

53rd Guards Motorized Rifle Regiment (All): (blue diamond) Place north of hex row 18 and between hex rows M and T.

58th Guards Motorized Rifle Regiment (All): (green diamond) Place north of hex row 18 and west of hex row L.

10th Artillery Division Assets (All): (black star) Enter anywhere from the north mapboard edge on Turn 4.

21st Artillery Regiment (All): (red star) Place north of hex row 6 and west of hex row N.

27th Guards Artillery Regiment (All): (blue star) Place north of hex row 6 and east of hex row M.

3rd SAM Brigade Assets (-): (black heart) Enter anywhere from the north mapboard edge on Turn 4.



33rd SAM Battalion (All): (green heart) Enter anywhere from the north mapboard edge on Turn 4.

Tactical Air Army Support: 2×MiG-21 (1-2), 3×MiG-23 (4-6), 3×MiG-27 (7-9), 2×MiG-29 (10-11), 3×Su-17, 2×Su-25 (22-23).

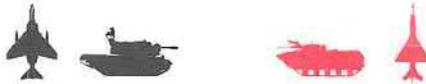
Other: If desired, mark 1 blown up bridge anywhere north of hexrow 20.

27.4.4 VICTORY CONDITIONS: The game lasts 24 Turns. Both sides get 1 victory point per enemy armored or infantry unit eliminated. The PACT player also gets 1 victory point per Soviet armored or infantry unit that ends the game in a Bamberg hex and the NATO player also gets 1 victory point per American armored or infantry unit that ends the game in a Dreiseckseckigdorf hex. After counting up the victory points, subtract the smaller total from the larger.

NATO Decisive Victory: +6 or more NATO victory points.
 NATO Tactical Victory: +3 to +5 NATO victory points.
 Draw (No Winner) : +2 NATO to +3 PACT victory points.
 PACT Tactical Victory : +3 to +5 PACT victory points.
 PACT Decisive Victory : +6 or more PACT victory points.

28.0 MASTER SCENARIOS

These scenarios are large and have lengthy playing times, and multiple players (possibly using the rules in option 22.0) on a side are suggested to control the units. They are intended for use by players who have fully mastered the game's mechanics.



28.1 SCENARIO TEN—"Bundeswehr": The West German 4th Jager and 12th Panzer Divisions, supported by some VII Corps assets, engage the Soviet 18th Guards Motorized Rifle and 51st Tank Divisions and their supports.

28.1.1 FIRST SIDE: PACT.

28.1.2 MAPBOARD: Use both mapboard sections. Enter/exit is south edge and west edge from south of hex B10 for NATO and north edge and east edge from north of hex DDD15 for PACT.

28.1.3 DEPLOYMENT:

NATO:

2/57 Air Defense Artillery Battalion (All): (U.S. green heart) Place south of hex row 20.

210th Artillery Group (All): (U.S. blue square) Place south of hex row 20.

26th Airborne Brigade (All): (German blue square) Enter anywhere from the south, north and/or east mapboard edge(s) on Turn 4.

4th Jager Division (All): (German triangle) Place south of hex row 10.

12th Panzer Division (All): (German circle) Place south of hex row 10.

AAFCE Air Support: 3×F-15 (1-3), 2×F4G (7-8), 4×A-10 (19-22), 1×EF-111 (25), 1×F-111 (27), 4×F4F (33-36), 2×Torn (37-38), 4×Alpha (39-42), 2×German RF-4 (45-46), 4×CF-18 (47-50).

Other: If desired, mark 1 blown up bridge, 2 minefields and 1 obstruction anywhere on the mapboard, except in East German hexes.

PACT:

Central Group of Forces Assets (All): (black square) Enter anywhere from the north mapboard edge on Turn 2.

393rd Airborne Regiment (All): (red "X") Enter anywhere from the north mapboard edge on Turn 6.

3rd SAM Brigade Assets (All): (black heart) Enter anywhere from the north mapboard edge on Turn 5.

31st SAM Battalion (All): (red heart) Enter anywhere from the north mapboard edge of mapboard section "A" on Turn 5.

32nd SAM Battalion (All): (blue heart) Enter anywhere from the north mapboard edge of mapboard section "B" on Turn 5.

10th Artillery Division (All): (star) Enter anywhere from the north mapboard edge on Turn 4.

18th Guards Motorized Rifle Division (All): (diamond) Enter anywhere from the north mapboard edge on Turn 1.

51st Tank Division (All): (triangle) Enter anywhere from the north mapboard edge on Turn 1.

Tactical Air Army Support: 1×MiG-21 (1), 3×MiG-23 (4-6), 3×MiG-27 (7-9), 2×MiG-29 (10-11), 3×Su-17 (16-18), 2×Su-24 (19-20), 2×Su-25 (22-23).

Other: Two biological/chemical weapons are available.

28.1.4 VICTORY CONDITIONS: The game lasts 24 Turns. The PACT side gets 1 victory point per Soviet armored or infantry unit that has exited from the mapboard at hexes EE34, QQ34, TT34 and/or VV33 by the end of the game. Use of one or both of the biological/chemical weapons reduces the PACT victory points awarded at the end of the game by "-2".

NATO Decisive Victory: 0 to 2 PACT victory points.
 NATO Tactical Victory : 3 to 5 PACT victory points.
 Draw (No Winner) : 6 to 7 PACT victory points.
 PACT Tactical Victory : 8 to 9 PACT victory points.
 PACT Decisive Victory : 10 or more PACT victory points.

28.1.5 SPECIAL RULES: While it would not be likely to see, as shown here, *only* West German forces engaged in the VII or V Corps areas, this would be a highly plausible engagement in other parts of Germany. If desired, as an interesting variant roughly representing a I German Corps/Northern Army Group (NORTHAG) engagement, players can simply disregard the elevations on the mapboard (consider all hexes to be the same elevation level).



28.2 SCENARIO ELEVEN—"Hof Gap": This scenario depicts U.S. forces facing the Soviets without assistance from West German units (presumably engaged elsewhere).

28.2.1 FIRST SIDE: PACT.

28.2.2 MAPBOARD: Use both mapboard sections. Enter/exit is south and west edges for NATO and north and east edges for PACT.

28.2.3 DEPLOYMENT:

NATO:

VII Corps Assets (All): (U.S. and German black square) Place south of hex row 20.

69th Air Defense Artillery Group Assets (All): (U.S. black heart) Place south of row 15.2

3/7 Air Defense Artillery Battalion (All): (U.S. red heart) Place south of hex row 15 on mapboard section "A".

6/52 Air Defense Artillery Battalion (All): (U.S. blue heart) Place south of hex row 15 on mapboard section "B".

72nd Artillery Group (All): (U.S. green square) Place south of hex row 15.

2nd Armored Cavalry Regiment (All): (U.S. red square) Place in *any* hexes except those in East German territory.

1st Armored Division (All): (U.S. triangle) Place south of hex row 11.

3rd Mechanized Infantry Division (All): (U.S. circle) Place south of hex row 11.

AAFCE Air Support: 6×F-15 (1-6), 4×F4G (7-10), 4×F-16 (13-16), 6×A-10 (19-24), 2×EF-111 (25-26), 2×F-111 (27-28), 2×U.S. RF-4 (31-32), 4×CF-18 (47-50).

Other: If desired, mark 2 blown up bridges, 1 minefield and 2 obstructions anywhere on the mapboard, except in East German hexes. Two tactical nuclear and 1 biological/chemical weapons are available.

PACT:

Central Group of Forces Assets (All): (black square) Enter anywhere from the north mapboard edge on Turn 2.

393rd Airborne Regiment (All): (red "X") Enter anywhere from the north mapboard edge on Turn 6.

583rd Airborne Regiment (All): (blue "X") Enter anywhere from the north mapboard edge on Turn 6.

3rd SAM Brigade (All): (heart) Enter anywhere from the north mapboard edge on Turn 4.

10th Artillery Division (All): (star) Enter anywhere from the north mapboard edge on Turn 4.

6th Guards Tank Division (All): (circle) Enter anywhere from the north mapboard edge on Turn 1.

18th Guards Motorized Rifle Division (All): (diamond) Enter anywhere from the north mapboard edge on Turn 1.

51st Tank Division (All): (triangle) Enter anywhere from the north mapboard edge on Turn 8.

Front Air Support: Use *all* Soviet air units (1-24).

Other: 1 tactical nuclear and 2 biological chemical weapons are available.

28.2.4 VICTORY CONDITIONS: The game lasts 24 Turns. The PACT side gets 1 victory point per Soviet armored or infantry unit that has exited from the mapboard at *any* edge hex numbered 33 or 34 by the end of the game and 1 victory point per NATO ground and helicopter unit eliminated in excess of the number of PACT ground and helicopter units eliminated (if PACT losses exceed NATO losses, this counts as "0" PACT victory points). If the NATO side is the first to use NBC weapons, award the PACT side at the end of the game "+1" victory point for a NATO "first use" of a biological/chemical weapon and/or "+2" victory points for a NATO "first use" of a nuclear weapon. These same numbers of victory points are *subtracted* from the PACT side at the end of the game if the PACT side is the first to use these weapons.

NATO Decisive Victory:	0 to 2 PACT victory points.
NATO Tactical Victory:	3 to 5 PACT victory points.
Draw (No Winner)	6 to 8 PACT victory points.
PACT Tactical Victory:	9 to 11 PACT victory points.
PACT Decisive Victory:	12 or more PACT victory points.



28.3 SCENARIO TWELVE—"VII Corps": This scenario uses *every* unit in the *TAC AIR* game and is the largest scenario that can be depicted.

28.3.1 FIRST SIDE: PACT.

28.3.2 MAPBOARD: Use both mapboard sections. Enter/exit is south and west edges for NATO and north and east edges for PACT.

28.3.3 DEPLOYMENT:

NATO:

VII Corps Assets (All): (U.S. and German black square) Place within 9 hexes of C34.

2nd Armored Cavalry Regiment (All): (U.S. red square) Place in *any* hexes except those in East German territory.

72nd Artillery Group (All): (U.S. green square) Place within 9 hexes of C34.2

210th Artillery Group (All): (U.S. blue square) Place within 3 hexes of U26.

26th Airborne Brigade (All): (German blue square) Enter from south mapboard edge on Turn 6.

69th Air Defense Artillery Group (All): (U.S. heart) Place south of hex row 15.

1st Armored Division Assets (All): (U.S. black triangle) Enter at B14 to B19 on Turn 3.

1st Brigade/1st Armored Division (All): (U.S. red triangle) Enter at G30 on Turn 2.

2nd Brigade/1st Armored Division (All): (U.S. blue triangle) Enter at the southern mapboard edge from T to EE on Turn 1.

3rd Brigade/1st Armored Division (All): (U.S. green triangle) Enter at the western mapboard edge from B14 to B19 on Turn 2.

3rd Mechanized Infantry Division Assets (All): (U.S. black circle) Place within 5 hexes of V26.

1st Brigade/3rd Mechanized Infantry Division (All): (U.S. red circle) Enter at B3 on Turn 2.

2nd Brigade/3rd Mechanized Infantry Division (All): (U.S. blue circle) Place within 5 hexes of T22.

3rd Brigade/3rd Mechanized Infantry Division (All): (U.S. green circle) Place within 5 hexes of R29.

4th Jager Division Assets (All): (German black triangle) Enter at the western mapboard edge from ~~B14~~ to ~~B19~~ on Turn 6.

10th Panzergrenadier Brigade (All): (German red triangle) Enter at southern mapboard edge from UU34 to VV33 on Turn 5.

12th Panzer Brigade (All): (German blue triangle) Enter at southern mapboard edge from UU34 to VV33 on Turn 4.

12th Panzer Division Assets (All): (German black circle) Enter at the southern mapboard edge from ~~UU34~~ to ~~VV33~~ on Turn 6.

35th Panzergrenadier Brigade (All): (German red circle) Enter at western mapboard edge at B3 on Turn 4.

36th Panzer Brigade (All): (German blue circle) Enter at G30 on Turn 5.

AAFCE Air Support: Use *all* NATO air units (1-50).

Other: 4 tactical nuclear and 2 biological/chemical weapons are available. Roll one die when setting up NATO forces: "1-3"=NATO is "surprised" and there is no time for engineer preparations; "4-6"=NATO is "prepared"—if desired, mark 3 minefields, 3 obstructions and 3 blown up bridges anywhere on the mapboard, except in East German hexes.

PACT:

Central Group of Forces Assets (All): (black square) Enter anywhere from the north mapboard edge on Turn 3.

3rd SAM Brigade (All): (heart) Enter anywhere from the north mapboard edge on Turn 4.

10th Artillery Division (All): (star) Enter anywhere from the north mapboard edge on Turn 6.

103rd Airborne Division (All): ("X") Enter anywhere from the north mapboard edge on Turn 8.

6th Guards Tank Division (All): (circle) Enter anywhere from the north mapboard edge from DD1 to KK1 on Turn 2.

18th Guards Motorized Rifle Division (All): (diamond) Enter anywhere from the north mapboard edge from J1 to W1 on Turn 2.

51st Tank Division (All): (triangle) Enter anywhere from the east mapboard edge from DDD2 to DDD13 on Turn 1.

Front Air Support: Use *all* Soviet air units (1-24).

Other: 2 tactical nuclear and 4 biological/chemical weapons are available.

28.3.4 VICTORY CONDITIONS: The game lasts 40 Turns. The PACT side gets 1 victory point per Soviet armored or infantry unit that exits the south edge of the mapboard through any edge hexes lettered T through VV by the end of the game and 1 victory point per NATO ground and helicopter unit eliminated in excess of the number of PACT ground and helicopter units eliminated (if PACT losses exceed NATO losses, this counts as "0" PACT victory points)—eliminated PACT units returned to play in reformed regiments are *not* counted as PACT losses for this purpose. If the NATO side is the first to use NBC weapons, award the PACT side at the end of the game "+1" victory point for a NATO "first use" of a biological/chemical weapon and/or "+2" victory points for a NATO "first use" of a nuclear weapon. These same numbers of victory points are *subtracted* from the PACT side at the end of the game if the PACT side is the first to use these weapons.

NATO Decisive Victory:	0 to 2 PACT victory points.
NATO Tactical Victory:	3 to 5 PACT victory points.
Draw (No Winner)	6 to 11 PACT victory points.
PACT Tactical Victory:	12 to 23 PACT victory points.
PACT Decisive Victory:	24 or more PACT victory points.

28.3.5 SPECIAL RULES: To represent reinforcement/second echelon forces not included in the game's counter mix, the PACT player may "reform" up to a total of four Tank or Motorized Rifle regiments during the game. To "reform" a regiment, at any time during a Preparation Phase, the PACT commander selects any appropriate regiment (obviously picking one that

has many eliminated units) and removes all of its surviving units (if any—simply announce that a regiment is being reformed if all units are eliminated) from the mapboard. All of the regiment's units (surviving and eliminated) are then put together and set aside. This can be done for more than one regiment during the same Turn, or per-

formed more than once for the same regiment (although *each* time "reformed" counts toward the maximum of four regiments), if desired. A "reformed" regiment's units can enter the mapboard from any edge hex along the northern mapboard edge starting on the Turn *after* they were "reformed".

If you like **TAC AIR**, you're bound to enjoy **FLIGHT LEADER**.
 Available wherever good games are sold...or direct from **The Avalon Hill Game Company**.
 For credit card purchasing only, call TOLL FREE:
1-800-638-9292

FLIGHT LEADER®



FLIGHT LEADER puts you into the cockpit of a high performance jet fighter, commanding two to eight aircraft. Your mission is to establish "air superiority" by sweeping the enemy from the skies. **FLIGHT LEADER** was originally designed by a fighter pilot for U.S.A.F. training and the key to this fast-playing game's unique blend of realism and playability is that it simulates *fighting* the jets rather than the small details of flying them. Strap on a sleek warbird and take to the air after reading only the four-page Basic Game Rules; then add more realism and rules sections as experience grows.

Refight virtually *any* air battle using the over 200 modern fighter aircraft types and 100 national air orders of battle from the Korean War gunnery duels to the deadly technology of present-day supersonic missile engagements. There are over 30 game scenarios and a point system for aircraft and crew quality that permits endless numbers of "design your own" scenarios.

As a flight leader, you will face the same considerations and make the same basic decisions as your real world counterparts. Four MiGs have just "bounced" your two Phantoms — what do YOU do now?

FLIGHT LEADER is now available for \$26.00 from The Avalon Hill Game Company, 4517 Harford Road, Baltimore, Maryland 21214. Please add 10% for shipping and handling per order (20% for Canadian orders; 30% for overseas orders). Maryland residents please add 5% state sales tax.

★ **Endless Scenario Variations:** Use any of the over two dozen scenarios covering the Korean, Middle East, India-Pakistan, Vietnam, and Falklands Wars or devise your own scenarios.

★ **Over 200 Different Jet Fighter Aircraft Types:** We're not claiming that ALL types are represented, but if an aircraft is classed as a fighter or fighter-bomber, the odds are that it's here and YOU can fly it.

★ **World Air Order of Battle:** 100 nations that operate jet fighters plus the aircraft they use and the quality of their pilots.

★ **Basic, Advanced and Optional Rules:** Rules with "layered complexity" to help in learning the game. Choose the levels of complexity and detail that YOU enjoy.



GROUND/HELICOPTER UNIT SYMBOLS

Air Defense (Gun-Armed):	M-163 	Gepard 	ZU-23 	ZSU-23  3-2 (2)
Air Defense (Missile-Armed):	Hawk 	Chaparelle 	Patriot 	Roland 
SA-4  2-2 (24)	SA-6 	SA-8 	SA-9 	SA-11 
	SA-13  2-2 (4)			
Anti-Tank Guided Missile:	M-901 	BRDM/ATGM 		ATGM Symbol 
Armored:	M-1 	Leopard II 	T-72  5-4	T-80  6-5
				Armored Symbol 
Artillery:	M-109  3-2 (8)	M-110  4-2 (8)	MLRS  4-2 (20)	Lance 
SAU-122  3-2 (4)	SAU-152  4-2 (6)	ASU-85 	BM-21 	Frog 
				105H(L) 
				130mm M-46 
Cavalry/Reconnaissance:	M-3  4-7	Luchs 		
	BRDM-2  3-3	Motorcycle 		Cavalry/Recon. Symbol 
Engineer:	U.S. AVLB  3-4	U.S.S.R. AVLB  3-3		Engineer Symbol 
Headquarters:	Corps/Front 	Division 	Brigade/Regiment/Battalion 	
Helicopter:	Apache  4x4	PAH-2 	Hind  4x3	Helicopter Symbol 
Infantry (Motorized/Mechanized):	M-2 	Marder 		
	BMP  3-4	BTR 		Infantry (Motorized/Mechanized) Symbol 
Paratrooper:	BMD 	Motorized Paratrooper Symbol 		Paratrooper Symbol 
Signal:	NATO (CEWI) 	PACT (REC) 		Signal Symbol 
Supply:	Supply Trucks 			Supply Symbol 



The Avalon Hill Game Company

Division of Monarch Avalon, Inc. • Printed in USA • All Rights Reserved

©1988 The Avalon Hill Game Company • Printed in USA

8720002