

ARCTIC FRONT

Battle for Norway

RULES BOOK

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Arctic Front

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INTRODUCTION

Arctic Front is a two-player game covering a potential land war in northern Europe at the end of this decade. One player (the Pact player) commands the military forces of the Warsaw

Pact; the other player (the NATO player) commands the forces of the North Atlantic Treaty Organization.

Arctic Front is the third game in the *Third World War* series and may be played by itself or in conjunction with *Third World War* and *Southern Front*.

RULE 1: GAME COMPONENTS

Arctic Front includes the following components:

A. Maps: There are two maps, labeled F and G. The maps are assembled into the game map by placing the east edge of map F adjacent to the west edge of map G. The game map shows most of northern Europe, the theater of operations covered by this game. A hexagonal grid is superimposed on the map to regulate positioning and movement of units. The hexagons (hexes) are numbered to assist easy location of specific hexes. For setup purposes, a specific hex is indicated by its map and hex number. For example, F-1010 refers to hex number 1010 on map F.

The play area includes all partial hexes along all edges of the map.

The distance across a hex represents 45 kilometers.

B. Counters: There is one counter sheet with a total of 240 counters. The counters are divided into three types: ground units, air units, and markers. Ground units (hereafter called *units* for brevity) represent the actual divisions, brigades, and regiments deployed in Europe or committed to reinforce units already there. Air units represent the combat aircraft of the combatants. Markers are used for various informational purposes. The information contained on the counters is explained on the unit identification chart.

Several NATO units included in the game are printed in gray. Most of these are units which are included in the counter mix of *Third World War*, the first game in the series, in their correct national colors. If players have *Third World War*, then they may use those counters. Units printed in gray have nationality IDs (U.S., Can: Canadian, UK: British, NATO: composite of various NATO nationalities) printed the same as army IDs for Pact units. One counter, the Soviet Blackjack air unit, is not used in the game. It is a replacement counter for the Blackjack in *Third World War*, which was printed with an incorrect strike rating.

C. Rules and Charts: All rules are contained in this booklet, along with the game's orders of battle and the expanded sequence of play. Note: For ease of reference, the rules in *Arctic Front* are presented in the same order as those in *Third World War*. Rules appropriate only for *Third World War* have been deleted, and rules appropriate only to *Arctic Front* added.

The briefing sheet contains background information on the two alliances and their armed forces, plus designer's notes.

Five separate sheets are included: one combat results table (and other tables needed during play), one terrain effects chart, one unit identification chart, and two identical aircraft status charts, one for the use of each player.

D. Dice: Two dice are included.

RULE 2: SEQUENCE OF PLAY

Arctic Front is played in a series of turns, each representing the passage of one week. Each turn is divided into four segments, and the segments are divided into impulses, sub-impulses, and phases. To play a turn, follow the sequence of play from beginning to end, exactly as shown below. No game

activity may take place out of sequence.

The Sequence of Play

Initial Segment

- Neutral Activation Phase
- Aircraft Maintenance Phase
- Weather Determination Phase
- Theater Air Superiority Phase
- Deep Strike Phase
- Supply Phase
- Critical Loss Determination Phase

Warsaw Pact Segment

- Norwegian Sea Control Phase
- Strike/Interdiction Phase
- Warsaw Pact First Impulse
 - First Echelon Sub-Impulse
 - Movement Phase
 - Combat Phase
 - Second Echelon/Breakthrough Sub-Impulse
 - Movement Phase
 - Combat Phase
- Regroup Phase

NATO Reserve Impulse

- Movement Phase
- Combat Phase
- Regroup Phase

Warsaw Pact Second Impulse

The second impulse is identical to the first impulse.

NATO Segment

- Strike/Interdiction Phase
- NATO First Impulse
 - Movement Phase
 - Combat Phase
 - Regroup Phase
- NATO Second Impulse

The second impulse is identical to the first impulse.

NATO Surrender Phase

Final Segment

- Aircraft Landing Phase
- Unsupplied/Grounded Recovery Phase
- Escalation Phase

A. Phasing Player: This term is used in subsequent rules to refer to the player whose units are moving, attacking, or performing other operations during a particular phase. The Pact player is the phasing player during the Pact first and second impulses; the NATO player is the phasing player during the NATO first and second impulses and the NATO reserve impulse.

B. Complexity: The sequence of play shown above may at first seem rather frightening. Notice, however, that many of the phases are repetitive: there are seven similar movement phases, each followed by a combat phase. Other phases are very easy to perform; the escalation phase, for example, requires only one die roll. Some phases are not used once certain events occur. It isn't as complex as it looks.

C. Expanded Sequence of Play: There is also a sequence of events which must be followed within some of the phases given above. For ease of description, the rules do not completely address this sequence. The complete sequence of all game events is covered in the expanded sequence of play in the back of the rules book. Players should refer to the expanded sequence

when playing the game.

RULE 3: ZONES OF CONTROL

Every unit exerts a zone of control (abbreviated ZOC) into the six hexes adjacent to it.

A. Types of ZOCs: There are two types of ZOC: standard and airmobile. All airmobile units (see the unit identification chart) and U.S. divisions have airmobile ZOCs; all other units have standard ZOCs.

B. Limits of ZOCs: Only airmobile ZOCs extend across full sea or lake hexsides (including bridged hexsides). Only airmobile ZOCs and the ZOCs of mountain units extend into mountain or mountain pass hexes. ZOCs (other than airmobile ZOCs and the ZOCs of mountain units) of units in mountain pass hexes extend across mountain pass hexsides only. Only the ZOCs of overland-capable units, ski units, and airmobile units extend into wilderness hexes. No ZOCs extend across the borders of neutral countries.

C. Effects of ZOCs: ZOCs have many effects, as explained in later rules.

RULE 4: STACKING

Several units may be placed in a single hex, one stacked on top of another. There is a limit to the number of units which may be present, based on the terrain of the hex and upon higher unit integrity.

A. Brigades: For stacking purposes, each regiment or brigade counts as 1 brigade. Each U.S. light infantry division counts as 2 brigades. All other divisions count as 3 brigades each.

B. Stacking Limits: In most terrain types, up to 10 brigades may stack in a hex. Only 7 brigades may stack in a swamp hex, only 4 in a mountain pass hex, and only 3 in a mountain hex or wilderness hex.

Stacking is further restricted in the Arctic. (The Arctic consists of all hexes north of the Arctic line.) In most terrain types in the Arctic, up to 3 brigades may stack in a hex. Only one brigade may be present in a mountain hex, mountain pass hex, or wilderness hex in the Arctic.

C. Higher Unit Integrity: If units of more than one Pact army or NATO country are stacked in a hex, the stacking limit is reduced by 3.

Most Pact units have an army designation, to the left of the unit type symbol. Units with the same army designation belong to the same army. Some units have no army designation; these units may be stacked with the units of any army without reducing the stacking limit.

Example: Ten Norwegian brigades may stack in a non-Arctic clear hex; but only five Norwegian brigades and a U.S. light infantry division (a total of 7 brigades) may stack in the same hex.

Note that units of different NATO countries or Pact armies may not stack at all in certain hexes.

D. When Limits Apply: Stacking limits apply at the end of each movement phase and at the end of every advance or retreat during each combat phase. Thus units may exceed the stacking limit while moving as long as the limit is not exceeded at the end of the phase.

RULE 5: MOVEMENT

Units move during the various movement phases, expending movement points from their movement allowances to move

from hex to adjacent hex and to cross certain hexsides.

A. When Units Move: The Pact player may move any of his units during the movement phase of the first echelon sub-impulse in both Pact impulses. The NATO player may move any of his units during the movement phases of both NATO impulses. The Pact player may move any of his units which are not in enemy ZOCs during the movement phase of the second echelon/breakthrough sub-impulse in both Pact impulses. The NATO player may move any of his units which are not in enemy ZOCs during the movement phase of the NATO reserve impulse. It is possible for a Pact unit to move four times and a NATO unit three times in a turn, although this is rare in practice.

B. Movement Allowance: Each unit has a movement allowance of 6 movement points in each friendly movement phase. This allowance may not be saved from phase to phase or transferred from unit to unit.

C. Mobility Classes: Each unit belongs to a particular mobility class, as shown on the unit identification chart. There are four classes: airmobile, mechanized, motorized, and leg-mobile. For brevity, units in the airmobile movement class are referred to as "airmobile units"; other classes are referred to similarly.

D. Movement Limitations: A unit may never enter a hex containing an enemy unit.

Only airmobile and amphibious units may cross unbridged full sea or lake hexsides. Only airmobile units may enter full sea hexes, and airmobile units may never end a movement phase in full sea hexes; airmobile units may enter only full sea hexes which are adjacent to partial sea hexes unless their side has air superiority in that theater (see rule 9). Note that only units with the amphibious symbol are considered amphibious units for purposes of movement. Units with the amphibious-trained symbol may not cross unbridged full sea or lake hexsides. (These units do have limited amphibious assault capabilities; see rule 11.)

Only airmobile, mountain, and ski units may enter mountain hexes. Units other than these units may enter or leave mountain pass hexes only through pass hexsides; airmobile, mountain, and ski units entering pass hexes across non-pass hexsides expend the movement cost to enter a mountain hex.

In wilderness hexes, overland units pay different MP costs than other mechanized units and ski units pay different costs than other leg units. These costs are given on the terrain effects chart. Note: An overland mountain unit is a mechanized unit. It moves as a mountain unit in mountain and mountain pass hexes, as an overland unit in wilderness hexes, and as a mechanized unit in other hexes.

No unit may enter a neutral country; see rule 17.

E. How Units Move: Units move from hex to adjacent hex, expending movement points to enter hexes, cross hexsides, and enter or leave ZOCs. A unit may enter a hex only if it has enough movement points remaining to pay the full cost of entering the hex (along with associated costs of hexsides or ZOCs). Exception: A unit may move one hex, regardless of cost, if that constitutes its only movement during the phase. Movement costs depend upon the terrain of the hex (or hexside) and the mobility class of the unit; all costs are shown on the terrain effects chart. For example, a mechanized unit entering a woods plus rough hex across a major river would expend 3 (2 + 1) movement points; it would then have 3 points remaining for further movement in the phase.

F. Effects of ZOCs: Units also expend movement points to

enter and/or leave hexes in enemy ZOCs. The cost depends on the unit's mobility class and the type of ZOC exerted into the hex, as shown on the terrain effects chart.

Note that airmobile units expend no movement points to enter or leave a standard ZOC, and that all units expend 2 movement points to enter or leave an airmobile ZOC.

The cost is only paid once per hex entered or left, regardless of how many enemy units exert ZOCs into the hex.

Example: A mechanized unit moving from a hex in an enemy airmobile ZOC to an adjacent clear hex in a standard ZOC would expend 4 movement points: 1 for the clear hex, 2 to leave an airmobile ZOC, and 1 to enter a standard ZOC.

G. Special Movement: Several types of special movement may be performed in a movement phase. Any unit may be moved by air transport (see rule 10) or naval transport (see rule 11). Airborne and mechanized airborne units may make airborne assaults (rule 10). Amphibious units may make amphibious assaults (rule 11).

RULE 6: GROUND COMBAT

During the various combat phases, units of the phasing player may attack adjacent enemy units. Units attack with their attack strengths and defend with their defense strengths. Proficiency ratings are also important in combat.

A. When Units May Attack: The Pact player may attack with any of his units during the combat phase of the first echelon sub-impulse in both Pact impulses. The NATO player may attack with any of his units during the combat phases of both NATO impulses. The Pact player may attack with any of his units which did not begin the sub-impulse in enemy ZOCs during the combat phase of the second echelon/breakthrough sub-impulse in both Pact impulses. The NATO player may attack with any of his units which did not begin the impulse in enemy ZOCs during the combat phase of the NATO reserve impulse. It is possible for a Pact unit to attack four times and a NATO unit three times in a turn, although this is somewhat unlikely in practice.

Attacking is voluntary; no unit is ever required to attack.

B. Restrictions on Combat: Units may attack only adjacent enemy units.

Only airmobile and amphibious units may attack across a full sea or lake hexside (including bridged hexsides).

Only airmobile and mountain units may attack into a mountain hex. Units other than airmobile and mountain units may attack into a mountain pass hex only through a pass hexside.

Only units which may move into a wilderness hex may attack into a wilderness hex.

A single unit may attack or be attacked at most once per phase. Each attack must be directed at the units occupying a single hex. All units in a hex defend together and may not be attacked separately. All units attacking a single hex attack together.

Any number of units may attack a single hex. However, only as many brigades may attack from a single hex as could stack in the defender's hex. For example, only 3 brigades could attack a mountain hex from any single other hex; thus a maximum of 18 brigades could attack a mountain hex (3 from each adjacent hex).

A unit with an attack strength of 0 may attack. (Reasons why this might be desirable include raising the average proficiency of an attack and gaining the ability to advance after combat.)

C. Determining Odds and Declaring Attacks: In each combat phase, the phasing player declares all his attacks before any are resolved. Once an attack has been declared, it must be carried out.

1. Odds: To determine combat odds in a single battle, divide the total attack strengths of all attacking units by the total defense strengths of all defending units. Express this ratio as one of the odds levels found on the combat results table, rounding down in favor of the defender. For example, in an attack of 39 strength against 8, the odds level is 4:1. The attack strengths of units may be modified before strengths are totaled; see 2 below. The odds may also be modified; see 3 below. Odds before modification may be higher than 10:1 in integral increments (11:1, 12:1, etc.) or lower than 1:5 (1:6, 1:7, etc.).

2. Attack Strength Modifiers: Units' attack strengths may be modified by terrain effects or by unsupplied status. Attack strengths are halved when attacking into certain hexes or across certain hexsides, depending on unit type; see the terrain effects chart. The attack strengths of unsupplied units are also halved; see rule 13. All strength modifiers are cumulative; a unit halved twice is quartered. When halving strengths, retain fractions; half of 7 is $3\frac{1}{2}$.

3. Odds Modifiers: A battle's odds may be modified by terrain effects, unit proficiency (see 4 below), or (during combat resolution) by the effects of air missions. Negative modifiers (all terrain effects are negative) reduce odds; a modifier of -1 reduces odds by one level; 14:1 becomes 13:1, 1:2 becomes 1:3, 2:1 becomes 1.5:1, etc. Positive modifiers increase odds. Modifiers are cumulative: separate modifiers of -1 , -2 , and $+2$ combine to reduce odds by one level.

4. Proficiency: Odds in an attack are affected by the difference in average proficiency of the attacking and defending units. To determine each side's average proficiency, total the proficiencies (as modified by disruption, isolation, and demoralization—see F below, rule 8, and rule 18) of all units involved and divide by the number of units. The side with the higher average proficiency receives an odds modifier in its favor (positive if attacking, negative if defending); the size of the modifier depends on the size of the proficiency difference, as shown on the proficiency modifiers chart.

For example, 3 units with proficiencies of 5, 4, and 7 attack two units with proficiencies of 6 and 6. The attacker's average proficiency is $(5+4+7)/3$, or $5\frac{1}{3}$. The defender's average proficiency is 6. Since the defender's proficiency is higher than the attacker's but less than 2 higher, the odds are modified by -1 .

In practice, it is often possible to determine modifiers without calculating average proficiencies. For example, if three units with proficiencies of 6 are attacked by two units with proficiencies of 6 and 7, it is obvious that the attacker's proficiency is higher than the defender's but less than two higher.

5. Odds Markers: After the odds of each attack are calculated, taking into account terrain and proficiency, place an appropriate *odds* marker on the defender's hex. If odds are less than 1:1 or greater than 10:1, players will have to remember the exact odds.

D. Combat Resolution: After all attacks are declared, they are resolved one by one in any order the attacker desires. One attack must be completely resolved before the next can begin. Each attack consists of the following steps.

1. Declare Air Missions: Both sides declare ground attack

and top cover missions. See rule 9.

2. Resolve Nuclear Attacks (Optional): If the nuclear warfare rule is in use and the conflict level is 1 or more, both sides may allocate and resolve artillery NAPs. See rule 22. Nuclear attacks cause disruptions and eliminate units, which may require combat strengths and proficiency differences to be recalculated.

3. Resolve Air Missions: Air missions declared in step 1 are resolved, including air combat and air defense fire. Successful ground attack missions result in odds modifiers.

4. Determine the Combat Result: After re-computing the odds if necessary after steps 2 and 3 (plus possible isolation of the defender resulting from advances after previous attacks—see rule 8), find the corresponding column of the combat results table. At this point, odds of greater than 10:1 become 10:1 and odds of less than 1:5 become 1:5. Roll a die and cross-index the odds with the die roll to determine the result. Apply the result immediately; see E below.

After step 4, repeat the procedure for the next battle.

E. Combat Results: There are four types of combat results (in addition to "no effect") on the combat results table. Results to the left of the slash affect the attacker and those to the right affect the defender. Only units participating in the attack are affected; all units in the defending hex are involved, but there may be units in the attacking hex which are attacking other hexes or not attacking at all.

E: Eliminated. All units of the affected side participating in the attack are eliminated.

D, 2D, 3D, 4D: Disrupted. All units of the affected side participating in the attack receive the number of disruptions indicated. See F below.

EX: Exchange. All defending units are eliminated. The attacker must eliminate attacking units whose total printed (unmodified) attack strength equals or exceeds the total defense strength of the eliminated defending units. Surviving attacking units suffer one disruption each.

R: Retreat. All defending units must retreat two hexes. See G below.

F. Disruption: Units may become disrupted in a variety of ways: through combat results, retreating through zones of control, air strikes, and failure of an airborne or amphibious assault. When a unit becomes disrupted, place a *disruption* marker (red for the Pact, black for NATO) of the correct denomination on top of it. Disruptions are cumulative. That is, if a unit which already has one disruption suffers an additional disruption, the *one-disruption* marker is replaced by a *two-disruption* marker.

To conserve markers (and avoid unwieldy stacks), one marker can be used to mark the disruption of all units below it; place undisrupted units on top of the marker. The highest-valued *disruption* marker is six; if a unit becomes disrupted more than six times, use two markers to represent its condition.

Each level of disruption reduces a unit's proficiency by one. Thus a unit with a printed proficiency of 7 and three disruptions would have a proficiency of 4. If a unit's total number of disruptions ever equals or exceeds its printed proficiency, the unit is eliminated. (Note the term *printed proficiency*; a unit is not made easier to eliminate if it is isolated or demoralized. See rules 8 and 18.)

Units recover from the effects of disruption by regrouping. See rule 7.

G. Retreats: The defending player chooses the retreat path

of his own units within the following restrictions. A retreating unit must be moved two hexes away from the hex it occupied during combat. If more than one unit was in the hex, all must retreat to the same hex. A unit may not retreat into a hex it could not enter or across a hexside it could not cross during movement (including the borders of neutrals).

There are priorities of retreat path, which apply in the order given.

1) A unit should not retreat into or through a hex containing a *strike* marker, if possible.

2) A unit should not retreat into or through an enemy zone of control, if possible. A unit suffers one disruption for each such hex entered during retreat.

3) A unit must retreat to a hex so that the stacking limits are not violated, if possible. (This applies to the final hex of the retreat only.) If not possible, the unit must continue to retreat one or more hexes (following the retreat rules) until it reaches a hex in which the stacking limits are not violated. Each additional hex of retreat must be one hex farther away from the original hex occupied by the unit.

A unit in a major city may ignore a retreat result (although it may retreat if the defender desires; if any units retreat, all must retreat). A unit which reaches a major city may end its retreat there, even if it has only retreated one hex.

If a unit is unable to retreat the full required distance, it remains in place and suffers four disruptions.

If a unit retreats into a hex which is attacked in the same phase, it contributes nothing to the defense of the hex but suffers the effects of the combat result.

H. Advance after Combat: If, at the conclusion of an attack, there are no defending units remaining in an attacked hex (through retreat or elimination), each attacking unit may (but is not required to) advance one or two hexes. The first hex of the advance must be the hex vacated by the defending units. No movement point costs are paid in the advance and the advancing units ignore enemy ZOCs. However, the advancing units may not move into or through terrain they could not enter during the movement phase. Stacking limits are in effect at the end of each advance.

At least one attacking unit must advance into the defender's hex and remain there. Remaining attacking units may advance 0, 1, or 2 hexes.

Certain terrain types limit advance to only one hex. See the terrain effects chart. If the defender's hex is one of the listed terrain types (or if the attacker's first hex of advance is across a major river hexside), the advance stops in that hex.

RULE 7: REGROUPING

Units may recover from disruption by regrouping.

A. When Units May Regroup: Units of the phasing player which did not move or attack during an impulse and which are not in enemy ZOCs may regroup in the regroup phase. There are two Pact regroup phases, one at the end of each Pact impulse, and three NATO regroup phases, one at the end of the NATO reserve impulse and one at the end of each impulse of the NATO segment.

B. How to Regroup: Each unit which regroups removes one level of disruption; for example, a unit with two disruptions would be reduced to one disruption.

C. Regroup Limits: Pact units with only one disruption may not regroup; when a Pact unit becomes disrupted, it carries at

least a single disruption for the rest of the game.

RULE 8: ISOLATION

Units unable to trace a line of communication are isolated. Isolation affects unit proficiency during the combat phase. Immediately before each battle takes place, determine if any participating units (attacker or defender) are isolated. Note that isolation is a completely separate concept from being out of supply. A unit may be in either condition, or both, or neither.

A. Line of Communication: A line of communication is a path of hexes of any length from a unit to a friendly source. The line may not enter terrain the unit could not enter in the movement phase; it may not enter a hex in an enemy ZOC unless the hex is occupied by a friendly unit.

B. Friendly Source: NATO units may trace their communications to any friendly-controlled port in the North Sea naval zone or in the the Norwegian Sea naval zone if controlled by NATO (see rule 11). Norwegian, Swedish, and Finnish units may trace their communications to any city in their own countries.

Pact units may trace their communications to any hex on the edge of the map G from G-0527 to G-2426, to any friendly-controlled port in the Baltic, Bothnia, or Barents Sea naval zones, or to any friendly-controlled port in the Norwegian Sea naval zone if the zone is controlled by the Pact.

A friendly-controlled port is one which friendly units were the last to occupy or which is in a friendly country and has never been entered by an enemy unit.

C. Effects: Isolated units have their combat proficiencies reduced by one and may not regroup.

RULE 9: THE AIR WAR

Both players have air units, each representing 100 aircraft of a single type. Air units are rated for range and serviceability, and effectiveness in three types of missions: air superiority, ground attack, and strike. In general, each air unit may be assigned to one mission each turn. (For the remainder of this rule, the term *unit* refers to air units.)

A. Basics: Some basic concepts of the air rule are explained here.

1. Theater: For the purposes of air operations, the game board consists of one theater: the Northern theater, comprising all countries and naval zones on the map.

2. Range: Since there is only one air theater in *Arctic Front*, the major effects of range are not used. However, range does affect certain missions, as described in those missions.

3. The Air Status Chart: Each player has an air status chart. All air units, except when actually flying a mission, are kept in one or another of the boxes on the chart. At the beginning of a turn most units will be in the *flown* box (if they flew a mission last turn) or in the *available* box. In the maintenance phase, units in the *flown* box which make their maintenance die rolls are moved to the *available* box. In the theater air superiority phase, units which will fly air superiority missions are moved from the *available* box to the *air superiority* box. Units in the *available* box and the *air superiority* box may fly missions during the turn, after which they are placed in the *flown* box or the *shot down* box, depending on the result of air combat and air defense fire. In the aircraft landing phase of every turn, all units remaining in the *air superiority* box are moved to the *flown* box. Every turn, half the units in the *shot down* box are returned to the *flown* box and half are eliminated from the game. The

grounded box contains units which are grounded and the crater track records the amount of cratering of theater airfields. The flow of air operations is explained in more detail below and in the expanded sequence of play. Both air status charts (and the units on them) should always be in full view of both players.

B. Maintenance: During the aircraft maintenance phase, each player rolls one die for each of his units in the *flown* box of the air status chart. If the die roll is less than or equal to the unit's maintenance rating, place it in the *available* box. Units which fail their maintenance rolls remain in the *flown* box and are not available to fly missions in that turn.

C. Crater Repair: During the aircraft maintenance phase, after units have been grounded, each player rolls one die and reduces the number of craters by the number rolled, recording this on the crater track.

D. Air Superiority Allocation: During the theater air superiority phase, both sides determine which of their units will be committed to air superiority missions each turn. Units allocated to air superiority are moved from the *available* box to the *air superiority* box. The Pact player allocates his units first, and the NATO player makes his allocations after examining the Pact allocations. In order to be committed to air superiority, a unit must have an air superiority rating of at least 1. The player who has committed more units to air superiority has gained air superiority and may send up to two units on each air superiority mission he flies during the turn; the other player (or both players if there is a tie) may send only one. Only units in the *air superiority* box may fly air superiority missions, and units in the box may fly only air superiority missions (but need not fly any mission at all). Units remaining in the *available* box may fly ground attack and strike missions.

E. Missions: There are three basic types of air missions: air superiority, ground attack, and strike. (Air transport missions are a fourth type, but these are performed not by air units but by air transport points, for which there are no counters. See rule 10.) Air superiority missions are subdivided into escort, interception, and top cover missions. Strike missions are subdivided into logistical strike, runway cratering, and strike/interdiction missions. In order to fly a mission, a unit must have a rating of at least 1 for that mission. The various types of missions are flown at several points in the turn; see the expanded sequence of play for details. In general, the Pact player declares his missions before the NATO player does. Units which fly air superiority missions must start in the *air superiority* box; units which fly ground attack or strike missions must begin in the *available* box. In order to perform their missions, ground attack and strike units must first survive air combat and air defense fire.

1. Ground Attack: Ground attack missions are flown in any combat phase, before each attack by ground units is resolved. Each player may commit one mission (composed of one unit) to each attack; missions fly to the defender's hex. If the unit survives air combat and air defense fire, its ground attack rating is applied during the ground battle as an odds modifier in favor of the owning player. It is possible for both players to have successful ground attack missions in a single battle, in which case both would receive modifiers. For example, if an F-18 and a MiG-27 both flew ground attack missions over the same battle, there would be an odds modifier of 3 in favor of NATO and 2 in favor of the Pact, for a net modifier of 1 in NATO's favor.

2. Strike: There are three types of strike missions. Logistical

strike and runway cratering missions are similar to each other and are referred to collectively as deep strikes.

Deep strikes take place in the deep strike phase. Short-range units may not fly these missions. Units do not fly to any particular location on the board.

a. Logistical Strike: If the unit survives air combat and air defense fire, roll the die a number of times equal to its strike rating. The total of the rolls is divided by two, with fractions rounded down to a whole number. This is the number of enemy brigades which become unsupplied (see rule 13).

b. Runway Cratering: If the unit survives air combat and air defense fire, roll the die a number of times equal to its strike rating. Each roll of 4 or 5 adds one crater to the enemy crater track. Each roll of 6 destroys one enemy air unit; record the number of units destroyed on the crater track, using the *destroyed on runway* marker. In the aircraft maintenance phase of the next turn, randomly choose that number of units from the *available* box and move them to the shot down box.

c. Strike/Interdiction: This mission takes place in either strike/interdiction phase. (Both sides may fly missions in each phase.) Units fly to any hex. Each player may commit one mission (one unit) to a hex. If the unit survives air combat and air defense fire, place a *strike* marker showing the correct player turn (NATO or Pact) in the hex and place under it a *disruption* marker equal to the unit's strike rating. Each ground unit present in the hex is attacked. For each ground unit, roll the die a number of times equal to the air unit's strike rating; each roll of 5 or 6 is a hit and causes one disruption. At the end of the strike/interdiction phase, the air unit returns to the *flown* box, but the *strike* marker remains in the hex for one full turn (until the beginning of the same phase of the next turn). Each ground unit (friendly or enemy) which enters a hex containing a *strike* marker is attacked; in addition to disruptions, each hit also reduces the unit's remaining movement allowance for that phase (if any) by one.

3. Air Superiority: There are three types of air superiority missions, all basically similar to each other. Each air superiority mission consists of one unit (or up to two if the side has air superiority). Escort missions protect friendly strike missions. Interception missions attack enemy strike missions. Short-range units may not escort logistical strike or runway cratering missions but may intercept them. One air superiority mission is allowed per player per strike mission. Top cover missions both protect friendly ground attack missions and attack enemy ground attack missions in a single hex. One top cover mission is allowed per player per hex.

F. Sequencing: The Pact player allocates his missions before the NATO player. In the deep strike and both strike/interdiction phases this is the sequence: first, the Pact allocates strike missions and escorts; second, NATO allocates interceptors to Pact missions and allocates strike missions and escorts; third, the Pact allocates interceptors to NATO strike missions.

In each combat phase, before each battle, this is the sequence: first, the Pact allocates any ground attack mission and top cover; second, NATO allocates any ground attack mission and top cover; third, the Pact may allocate a top cover mission if no ground attack or top cover mission was allocated in step one. See the expanded sequence of play.

G. Air Combat: Air combat takes place before each strike or ground attack mission is resolved. Air combat occurs in two rounds.

1. First Round: Units escorting and intercepting the same mission, or flying top cover over the same hex, fire at each other. Units fire once, in order of their air superiority ratings, with the highest rating firing first. If two units have the same rating, they fire simultaneously. If there are two enemy air superiority units in the mission, the attacker chooses either one as his target. The attacker rolls a die and consults the air combat table, cross-indexing the roll with the firing unit's air superiority rating, to determine the result.

2. Second Round: If, at the conclusion of the first round, all enemy escorts or top cover have been shot down or aborted, surviving interceptors or top cover may fire at enemy strike or ground attack units; these units may not fire back. Add one to the air combat die roll in the second round.

3. Air Combat Results: There are four possible results (in addition to no effect).

H: Halved. The unit's rating (air superiority, ground attack, or strike) is halved for the remainder of the turn. Round fractions to the nearest whole number, rounding once, perform all halving before rounding off.

A: Aborted. If this occurs in the first round, the unit may still fire (if it has not already fired) but returns to the *flown* box at the conclusion of the round. If this occurs in the second round, the unit returns to the *flown* box immediately without performing its mission.

SH: Shot down and halved. At the conclusion of the round, the unit is placed in the *shot down* box. If hit in the first round, it may still fire (if it has not already fired); if hit in the second round, it may still perform its mission; in both cases its rating is halved.

SX: Shot down immediately. The unit is immediately shot down; it may not fire (unless it was firing simultaneously with the unit which shot it down) or perform its mission.

If two units are flying a mission, both fire at the same unit. Even if the first unit to fire shoots down or aborts the enemy units, the second unit may still fire at it. If a unit is hit twice, the effects of both results occur. Thus SX supersedes all other results, SH supersedes A in the first round, SH plus A equal SX in the second round, two H results combine to quarter an aircraft's ratings, and so on.

Example: A NATO F-16 and Pact Su-27 and MiG-23 are flying top cover in a hex (the Pact achieved theater superiority and thus can fly two units per mission). In the first round, the Su-27, with a rating of 5, fires first. It rolls a 1, for a result of H. The F-16, with a rating of 4, fires next. Since it was halved, its rating is 2. It fires at the Su-27, rolling a 4, for a result of H. The MiG-23, with a rating of 3, fires last. It rolls a 5, for a result of SH. At the end of the first round, the F-16 is placed in the *shot down* box. In the second round, the Su-27 and the MiG-23 may fire at any NATO ground attack unit in the hex; note that the Su-27's rating will be 3, since it suffered an H result in the first round.

H. Air Defense Fire: If it survives air combat, a unit flying a strike or ground attack mission is subject to air defense fire. Roll a die for each unit and consult the column of the air defense table corresponding to its mission. Results are identical to those of air combat. (The results in the *airborne assault* column are explained in rule 10.) Units which receive an H or SH result perform their missions with their ratings halved; units which receive an A result do not perform their missions.

I. Terrain Effects: The strike and ground attack ratings of units

performing strike/interdiction and ground attack missions in woods or woods plus rough hexes (including wilderness woods and wilderness woods plus rough) are halved (as shown on the terrain effects chart); rounding is performed as explained for the H combat result above.

J. Loss Consolidation: Both players consolidate their air losses in the aircraft maintenance phase. Remove all units from the *shot down* box and place them in a cup or other opaque container. If the box contained an odd number of units, randomly draw one unit from the cup and return it to the *shot down* box. Then randomly draw half the units from the cup and place them in the *flown* box. The air units remaining in the cup are permanently eliminated; set them aside.

RULE 10: AIR TRANSPORT AND AIRBORNE ASSAULTS

Both sides possess air transport capabilities, measured in air transport points. The NATO player may use 1 air transport point in each movement phase of the NATO first and second impulses; no air transport occurs in the NATO reserve impulse. The Pact player may use up to 4 air transport points in the movement phases of the Pact first and second impulses (in either movement phase of the impulse, but no more than 4 per impulse). For example, in the Pact first impulse the Pact player could use one point in the movement phase of the first echelon sub-impulse and three in the movement phase of the second echelon/breakthrough sub-impulse, or two in the first and two in the second, or four in the first and none in the second, etc. Air transport points have two uses: air transport and airborne assault. Different units require different amounts of air transport points to move.

A. Air Transport: Any unit may be moved by air transport. It must start the phase in a city or airfield not in an enemy ZOC and moves to any friendly-owned city or airfield not in an enemy ZOC. It may not otherwise move in the phase and may not attack.

B. Airborne Assault: Only airborne and mechanized airborne units may make airborne assaults. The unit must start the phase in any city or airfield not in an enemy ZOC and moves to any hex on the board not occupied by an enemy unit except a full sea, mountain, or mountain pass hex or any hex in a neutral country. It may not otherwise move in the phase, although it may attack. Airborne assaults are similar to air missions. They may be escorted and intercepted by air units and are subject to air defense fire.

1. Air Units: The player making the assault first assigns escorts; then the other player assigns interceptors. Air combat occurs as described in rule 9. If the unit is shot down, it is destroyed and half the air transport points used to lift it are permanently destroyed. If the unit is aborted, it returns to the hex it came from.

2. Air Defense Fire: Roll a die, adding 1 if the hex assaulted is in an enemy ZOC, and consult the air defense table. If the result is AD or A2D, the unit returns to the hex it came from. On AD, it receives one disruption; on A2D, it receives two disruptions.

C. Air Transport Costs: The number of points required to transport a unit depends on its type and number of brigades. The number of points required to transport a brigade of each type is shown on the unit identification chart. For airborne assaults, double the cost. Thus, an airborne assault by a mechanized airborne brigade costs 4 points.

RULE 11: NAVAL TRANSPORT AND AMPHIBIOUS ASSAULTS

Any unit may move by means of naval transport. Amphibious units may conduct amphibious assaults. Both may occur during any friendly movement phase except the movement phase of the NATO reserve impulse. NATO units may use naval transport and make amphibious assaults in the North Sea naval zone; Pact units may use naval transport and make amphibious assaults in the Barents Sea, Bothnia, and Baltic naval zones. Both sides may use naval transport and make amphibious assaults in the Norwegian Sea naval zone, under the conditions described in C below.

A. Naval Transport: A unit moving by naval transport must start the movement phase in a port and moves to any friendly-controlled port in the area where that side may use naval transport. It may not move thereafter in the phase. The destination may be in an enemy ZOC; the starting point may be in an enemy ZOC if another friendly unit begins the movement phase in the hex and remains there for the entire phase.

The naval zones in which the Pact player may use naval transport are divided into two groupings: Baltic/Bothnia and Barents Sea/Norwegian Sea. While Pact units may use naval transport between ports within a grouping (for example, from Hango in the Bothnia naval zone to Kalmar in the Baltic naval zone), they may not use naval transport between ports in different groupings. For example, Pact units may not use naval transport to move from Tallinn in the Bothnia naval zone to Murmansk in the Barents Sea naval zone. Note: The body of water adjacent to Arkhangelsk is part of the Barents Sea naval zone.

In addition to ports marked on the map, all one-hex islands (that is, an island contained within a single hex) are ports.

B. Amphibious Assault: Amphibious assaults may be conducted by amphibious units. The unit making the assault must begin the movement phase in a port and may move to any partial sea hex in the area where that side may use naval transport; the destination hex may not be a full sea, mountain, or mountain pass hex or any hex in a neutral country. The unit may not otherwise move in the phase, although it may attack.

Amphibious units may move to an enemy-occupied hex. The amphibious unit must attack in the combat phase. In addition to all other combat effects, the unit's attack strength is halved. The attack may be made in conjunction with other units; the amphibious unit has no ZOC during this combat phase. If the hex attacked is vacated by enemy units due to combat, the amphibious unit remains in the hex. If the attack does not cause the hex to be vacated, the amphibious unit suffers two additional disruptions (in addition to any caused by the combat) and returns to the port it came from.

An amphibious unit may be evacuated from a partial sea hex that does not contain a port. The hex must be in a naval zone where naval transport/amphibious assault is allowed for the owning player. The amphibious unit may be withdrawn from the hex and transported by sea to a friendly-controlled port. A unit that is evacuated immediately suffers two disruptions.

The British commando brigade is an amphibious unit.

Pact amphibious-trained motorized rifle units have limited amphibious assault capabilities. They follow the standard amphibious assault rules, except that their destination hex may only be a port hex and may not be occupied by an enemy unit.

C. The Norwegian Sea: The Norwegian Sea naval zone has a number of special rules governing its use. During the

Norwegian Sea control phase, the Pact player rolls two dice and consults the Norwegian Sea control table. The die roll is modified by +1 for each airfield hex the Pact player controls. The result from the table determines which player controls the Norwegian Sea naval zone that turn. A player may not use naval transport or make amphibious assaults in this zone if it is controlled by the other player. If the result is disputed control, neither side controls the zone and both sides may attempt to use naval transport and to make amphibious assaults in the zone. One die is rolled for each unit attempting to do one of these actions. On a roll of 1 through 4, the attempt succeeds and the unit lands at its destination. On a roll of 5 or 6, the attempt fails and the unit is returned to its port of embarkation; the unit may not otherwise move during that movement phase.

RULE 12: WEATHER

Since the game is assumed to take place in the late spring and early summer, weather does not have a profound effect on play. However, weather effects are not negligible, either, and so are considered.

A. Weather Determination: In each turn's weather determination phase, roll a die and consult the first column of the weather table. Two results are possible: clear or poor. Clear weather has no effect. If poor weather is rolled, roll again and consult the second column. Three results are possible: overcast, storms, and severe storms.

B. Weather Effects: Adverse weather can affect air units, air transport, airmobile units and ZOCs, and naval transport.

1. Overcast: Overcast weather affects only aircraft. All aircraft ratings which do not have all-weather capability are halved, rounding fractions down. (This precedes all other halvings performed on aircraft ratings.) Note that if the unit's rating was 1, it is now 0, and a unit may not perform a mission for which its rating is 0.

For example, a MiG-27 has an air superiority rating of 1, a ground attack rating of 2, and a strike rating of 2. Only the strike rating has all-weather capability. Thus, in overcast the MiG-27 would have an air superiority rating of 0 and could not perform air superiority missions. It would have a ground attack rating of 1 and a strike rating of 2.

2. Storms: During storms, air units may fly only missions for which their ratings have all-weather capability. For example, the MiG-27 cited above could fly only strike missions during storm turns.

Storms also affect the ability of units to conduct amphibious and airborne assaults. Whenever a unit attempts such an assault during a storm turn, roll a die. On a roll of 1-3 the unit is turned back and must return to the city or port it came from. This die roll is made separately for each unit attempting such an assault.

3. Severe Storms: No aircraft may conduct any mission during a severe storm. No unit may conduct an amphibious or airborne assault during a severe storm. The movement allowances of all airmobile units are reduced to 3 during a severe storm turn, and all units with airmobile ZOCs are instead considered to have only standard ZOCs.

RULE 13: SUPPLY

Units may be placed out of supply (becoming unsupplied) through the effects of logistical strikes (see rule 9) or, optionally,

the effects of a Pact logistics breakdown (rule 20) or strategic nuclear exchange (rule 22). Note that being out of supply, in this game, is a completely separate concept from isolation. A unit may be in either condition, both, or neither.

A. Determining Which Units Are Unsupplied: During the supply phase, players determine which enemy units are out of supply. First, total the number of brigades which are out of supply as a result of the causes given above. Then each player chooses which enemy units are out of supply and places *unsupplied* markers on them. For example, if it is determined that four Pact brigades are unsupplied, the NATO player may choose any one Pact division and one brigade (or no divisions and four brigades). He may not choose two divisions, since that would total six brigades.

B. Emergency Supply Priorities: After his units have been placed out of supply, a player may place any of these units back in supply by giving affected units emergency supply priority. In order to do so, the player must place out of supply other units of his totaling twice as many brigades as the units placed back in supply. For example, if the Pact player in the example above wished to remove the *unsupplied* markers from all those units, he would have to place markers on other units totaling 8 brigades.

C. Effects: Units which are unsupplied have their movement allowances halved (to three movement points per phase) and their attack strengths halved (retaining fractions). Units which are unsupplied remain unsupplied until the unsupplied/grounded recovery phase, at which time all *unsupplied* markers are removed.

RULE 14: GROUNDING

Air units may become grounded due to runway cratering (see rule 9) or, optionally, the effects of a Pact logistics breakdown (rule 20) or strategic nuclear exchange (rule 22).

A. Grounding Procedure: All grounding occurs during the aircraft maintenance phase. First, randomly choose a number of air units from the *available* box equal to the number of craters on the crater track and place them in the *grounded* box.

Then perform other grounding caused by a strategic nuclear exchange or Pact logistics breakdown. In both cases, one or more dice are rolled to determine the number of air units grounded. Unlike grounding for craters, the owning player chooses which of his units are taken from the *available* box and placed in the *grounded* box.

B. Effects: Grounded air units may not fly that turn. All grounded units are returned to the *available* box in the unsupplied/grounded recovery phase of the turn.

RULE 15: NEW UNITS

During the game both players receive reinforcements. Reinforcements are marked on the back of the counter with the turn of their arrival. Air units and ground units are received at different points in the turn, as explained below.

A. Air Units: Air units are received at the start of the aircraft maintenance phase. They are placed in the available box of the air status chart, and thus are available to fly missions that turn.

B. Ground Units: Ground units are received at the start of the movement phase of a player's first impulse. The units of different nations are received differently. Units which are stated as *appearing* are placed in a hex on the board and have their entire movement allowances available in that phase. Units

which appear may appear in friendly-controlled cities and ports, only one to a hex; if no such hex is available (for example, if three units are to appear in cities and there are only two cities in that country), the unit is delayed until the next turn (at least). Units which are stated as *entering* must move into a hex on the edge of the map, expending the movement cost of the hex as they do so.

1. Soviet: Soviet units may both appear and enter. They appear in cities in the Soviet Union; they enter anywhere along the edge of map G in the Soviet Union from G-0527 to G-2426. Soviet units may also enter by naval or air transport. The Pact player may split his units between appearing and entering as he wishes.

2. POMCUS: POMCUS is an acronym for Pre-positioned Overseas Material Configured in Unit Sets. In *Arctic Twilight*, the POMCUS site contains equipment for the U.S. 2nd Marine Brigade. On turn 2, the brigade appears on its POMCUS site, where its POMCUS marker is located. If the POMCUS site has been destroyed, the unit is delayed for three turns, appearing on turn 5 in the same manner as other U.S. units appear. The POMCUS site is destroyed if any enemy unit enters the hex.

3. U.S., British, Canadian, NATO: U.S., British, Canadian, and NATO units appear in any port in the North Sea naval zone. They may appear in any port in the Norwegian Sea naval zone only if the zone is controlled by NATO. They may enter by air transport.

4. Norwegian: Norwegian units appear in specific hexes in Norway, as printed on the backs of the counters. If the appearance hex is occupied by a Pact unit, the appearing Norwegian unit is eliminated instead. Norwegian units with appearance hexes on map B enter play on turn 2 by entering at F-0109, F-0111, or F-0112 or by entering by air or naval transport.

RULE 16: SPECIAL RULES

A. Swedish Territorial Reservists: Swedish units with a 7 in the upper left corner of the counter are territorial reservists.

Swedish territorial reservists are scheduled to enter play on turn 1, but these units do not automatically enter play this turn. At the beginning of the movement phase of the first impulse of each NATO segment, roll one die for each territorial unit which has not yet entered play. If the die roll is equal to or less than the current turn number, the unit appears. If the die roll is higher, the unit remains in waiting to appear in a subsequent turn. Territorials appear in Swedish cities in the same way other units appear (see rule 15).

Swedish territorials may never leave Sweden (including retreat as a result of combat).

B. Finnish Partisans: Starting with the game turn following the turn Finland enters the war, the effects of Finnish partisans are in force. Pact units may not trace communications through a wilderness hex in Finland unless the hex is occupied by or in the ZOC of a Pact unit when communications are traced. Once triggered, the effects of Finnish partisans remain in force for the rest of the game, even if Finland becomes shaken, becomes demoralized, or even surrenders. Note: Finland enters the war when the Pact violates Finnish neutrality, except in the case when the Pact attempts Arctic passage and Finland's Arctic passage reaction chit is in force. See rule 17.

C. Soviet Divisional Breakdowns: Certain Soviet divisions may break down into regimental combat groups, allowing their

special organization or training for northern European operations to be used. Six motorized rifle divisions (45th, 54th, 37th Guards, 45th Guards, 77th Guards, and 111th Guards) and one *desant* division (76th Guards) may break down.

Divisions may break down and build up during any Pact movement phase. A division may either break down or build up in a movement phase; it may not do both in the same phase. It may break down or build up at any time during the phase.

When breaking down, the division is removed from the map and its three regiments are placed in its hex; each regiment has MPs remaining equal to the MPs remaining of the parent division. When breaking down a disrupted division, each regiment has the same number of disruptions as the parent division. For example, a Soviet division with two disruptions expends 2 MPs and then breaks down. Each of its three regiments has 4 MPs remaining and has two disruptions.

When building up, the three regiments must be stacked together. They are removed from the map and their parent division is placed in their hex; the division has MPs remaining equal to that of the regiment with the least MPs remaining. When building up a division with disrupted regiments, the average number of disruptions per regiment (rounded up) is the number of disruptions of the division. For example, a Soviet division is to be built up. The first regiment has no disruptions, the second regiment has 2, and the third has 3. The average disruption per regiment is $(0 + 2 + 3/3 = 5/3 =) 1\ 2/3$; thus, the built-up division has 2 disruptions.

RULE 17: NEUTRALS

Sweden and Finland are neutral. Neither player's units may enter a neutral country.

Sweden receives reinforcements even when it is neutral; these reinforcements (the territorial reserves) are placed on the map by the NATO player at the same time as NATO reinforcements are received.

Finland and Sweden may enter the game. Their entry depends both upon the actions of the Pact against them and their neutral reactions chits.

A. Invasion: The Pact player may violate the neutrality of Sweden and/or Finland during any turn, declaring this action during the neutral activation phase of the turn. During the phase, the Pact player states whether he is seeking Arctic passage or is making an outright invasion. In Arctic passage, Pact units may only move and attack in Arctic hexes of the violated neutral. In outright invasion, Pact units may operate anywhere in the invaded country. The Pact player declares Arctic passage in one turn and then declares an outright invasion in a subsequent turn against the same country.

B. Neutral Reaction: There are three neutral reaction chits each for Finland and Sweden. Before the game begins, the NATO player randomly draws one chit from each neutral's set, examines it without revealing it to the Pact player, and places it face down in the neutral's capital. The remaining chits are placed aside.

When the Pact violates the neutrality of the neutral or when indicated by the chit, the NATO player reveals the chit to the Pact player. The reaction of the neutral is governed by the chit:

Arctic Passage: If the Pact player declared Arctic passage, then Finland (only Finland has this chit) does not resist this violation and remains neutral. Immediately move the Finnish unit in the Arctic from hex G-1511 to hex G-1012. If the Pact player

declared outright invasion, then treat this chit the same as local defense.

Local Defense: If the Pact player declared Arctic passage, then the neutral resists with limited forces. For Finland, only the unit in the Arctic may move and attack. For Sweden, only Norrland brigades (the brigades with an "n" as part of their unit IDs) may move and attack. For both nations, the units allowed to operate may move and attack only inside their own countries; other national units may not move or attack; and NATO forces may not enter, attack, or fly missions in the nation's territory. If the Pact declared outright invasion, then all forces of the invaded nation may operate. However, ground units may move and attack only inside their own country. Air units may not fly logistical strike or runway cratering missions and may fly missions only in hexes inside their own country. NATO forces may not enter, attack, or fly missions in the nation's territory.

Neutral: The country immediately joins NATO when its neutrality is violated, regardless of whether the violation is Arctic passage or outright invasion. The country is treated as a part of NATO: there are no special restrictions on the operations of its forces or on other NATO forces. For example, if Sweden joins NATO, then Swedish units may leave Sweden and other NATO units may enter Sweden.

Limited Participation Turn 3: During the neutral activation phase, the NATO player reveals this chit to the Pact player. Sweden remains neutral but sends an expeditionary force to aid NATO. All Norrland brigades and any one Swedish air unit comprise the expeditionary force. The air unit is treated as a NATO reinforcement air unit. The Norrland brigades must enter Norway before they are treated as full NATO units. Before then, they may not attack. Once they leave Sweden, they are treated as full NATO units and may not subsequently re-enter Sweden while neutral. If the Pact violates Sweden's neutrality (either with Arctic passage or outright invasion; either before or after the chit is revealed), Sweden joins NATO.

RULE 18: CRITICAL LOSSES

After certain nations have taken substantial losses, the morale of their armed forces will decline. Two effects are possible; in order of severity, they are *shaken* and *demoralized*. Critical loss levels are determined in the critical loss determination phase of each turn. At that time, the losses of each nation subject to critical losses are counted to determine if the nation has reached either critical loss level. If it has, the effects of that loss level are in effect for that nation for the remainder of the game. If a nation is shaken and later takes losses sufficient to demoralize it, the effects of demoralization replace those of being shaken.

A. Counting Losses: All losses are counted by brigades. Air units in the *shot down* box do not count toward critical losses. Air units removed from play due to loss consolidation count as one brigade each for critical loss purposes. The number of brigades each susceptible nation must lose to become shaken or demoralized is given on the critical loss chart. For example, Norway will become shaken after losing nine brigades, and will become demoralized after losing five more (for a total of 14).

B. Vulnerable Nations: The following nations are susceptible to becoming shaken and demoralized. Other nations are not susceptible and their losses need not be recorded. Vulnerable nations are Finland, Norway, and Sweden.

C. Shaken: Once a nation becomes shaken, place a shaken marker somewhere within its borders. No unit of that nation may attack unless the unit and the hex it is attacking are both within that nation's boundaries.

Air units may not fly the logistical strike or runway cratering missions, may not fly strike/interdiction missions except to hexes within their own nation, may not fly escort missions except to escort strike/interdiction missions within their own nation, and may not fly ground attack missions or top cover missions unless at least one of the ground units involved in the battle (attacker or defender) is of their own nationality.

D. Demoralized: Once a nation becomes demoralized, remove the shaken marker and place a demoralized marker within its borders. All surviving ground units must return to their own national territory by the quickest route. Any demoralized units outside their national territory in the next critical loss determination phase are removed from play. No unit of that nation may attack under any circumstances. All surviving units have their proficiencies reduced by 1.

Air units may fly only interception, ground attack, and top cover missions. Interception missions may only be flown against strike/interdiction missions and airborne assaults against a hex in the demoralized nation. Ground attack and top cover missions may only be flown during enemy combat phases and in support of a ground unit of the demoralized country which is inside the demoralized country.

RULE 19: SURRENDER

Under certain circumstances, certain countries may surrender. These countries are Finland, Norway, and Sweden. A country will surrender if, during the owning player's surrender phase, all cities in that country are controlled by the opposing player (the opposing player's units occupy the city or were the last to pass through the city).

If a country surrenders, all ground and air units of that country are immediately removed from play.

RULE 20: SCENARIOS AND VICTORY CONDITIONS

There are two scenarios in *Arctic Front*: the standard game, which lasts for eight turns, and the extended game, which lasts for twelve turns.

A. Victory Points: In each game, victory is determined at the end of the game by means of victory points, which are based on the number of cities, ports, and airfields controlled by the Pact. Cities and ports in nations that are neutral at the start of the game are not counted for victory, even if the nation subsequently enters the war (voluntarily or through invasion). A city, port, or airfield is controlled by the Pact if a Pact unit occupies it or was the last unit to pass through it, or if it is in the Soviet Union and has never been occupied by a NATO unit. At the end of the game, the Pact player receives two victory points for each major city he controls and one victory point for each minor city. He receives one victory point for each mainland, non-city port he controls; he receives no points for ports on islands (such as G-1902) or for ports that are also cities (such as Bergen, F-0305). In order to be counted, a city, port, or airfield may not be isolated (the definition of isolation is the same as that for a mechanized ground unit; see rule 8).

The Pact player does not receive victory points for cities in nations that are neutral at the start of the game. However, the Pact player does receive two victory points for each neutral

nation that surrenders to the Pact after entering the war. For example, if Sweden enters the war, the Pact player receives no victory points for controlling Swedish cities but receives two victory points for forcing Sweden to surrender.

B. The Standard Game: Victory in the standard game is determined based on the table below.

Victory Points	Result
7 or less.....	NATO overwhelming victory
8-11.....	NATO substantial victory
12-15.....	NATO marginal victory
16-18.....	Pact marginal victory
19-22.....	Pact substantial victory
23 or more.....	Pact overwhelming victory

C. Extended Game: The standard game length of eight turns was chosen because it is the probable maximum length of time that the Warsaw Pact logistical system could sustain an offensive. Thus, a Warsaw Pact victory would have to be insured by about the eighth week, or sooner, before the logistical scales began tipping the contest in favor of NATO. The extended game gives players a chance to try to sustain an offensive past this point. The following rules are added to simulate the gradual breakdown of the Warsaw Pact logistical system.

Beginning in the supply phase of turn six, the NATO player rolls the die twice for Pact supply deficiencies. The first die roll is the number of air units grounded. The second die roll is the number of ground units unsupplied. The NATO player picks which Pact ground units are unsupplied; the Pact player picks which air units are grounded. This die roll is repeated each supply phase for the rest of the game.

Beginning on turn eight, the die is rolled once for air units and twice for ground units. Beginning on turn ten, the die is rolled twice for air units and twice for ground units. On turn twelve, the die is rolled twice for air units and three times for ground units.

Victory in the extended game is calculated according to the same table used in the standard game, but subtract three points from the Pact total.

D. Strategic Reserve: If the Pact's strategic reserve is used in the game (see rule 21), victory conditions are modified. Calculate victory as above, but shift the victory achieved two levels in favor of NATO. (For example, a Pact substantial victory becomes a NATO marginal victory.) Shift the victory achieved one level in favor of the Pact if Norway surrenders, and shift the victory achieved one level in favor of the Pact if Sweden surrenders. Note that the Pact may achieve an overwhelming victory only by scoring 23 or more victory points and forcing both Norway and Sweden to surrender.

RULE 21: SETUP AND FIRST TURN

To ease setting up the game, all units have deployment information printed on the back of the counter. To begin, sort all counters into those which are available initially and those which are received after the game starts.

A. NATO Setup: NATO sets up first. NATO forces initially available are all ground units with "NO" (for Norway) printed on the backs of their counters and the air unit with "N" (for Northern theater) printed on its back. All initially available NATO units are set up in the hex printed on the back of the counter. For example, a unit printed with G-2106 would be placed in hex 2106 of map G. The initially available air unit is placed in

the *available* box. The NATO player places his POMCUS marker on the map, on the POMCUS site hex (F-1805). Remove the U.S. 172nd Infantry Brigade from the NATO reinforcements; this unit is not used in the game except per optional rule 23.

Finally, the NATO player randomly picks one chit from each set of chits for Finland and Sweden. The NATO player examines the chits and places them in the appropriate capitals. Initially available neutral ground units are set up, similar to NATO.

B. Pact Setup: The Pact sets up after NATO. Initially available Pact units have only "SU" printed on them, not a specific hex; they may be placed in any hex in the Soviet Union. Divisions may be set up broken down. Initially available air units have "n" printed on their backs and are placed in the *available* box.

C. Pact Strategic Reserve Commitment: Pact ground unit reinforcements with an "R" following the turn number on their backs and Pact air units with an "R" for their theater on their backs are the Pact's strategic reserve. Before the Pact sets up, the Pact player determines if the strategic reserve is committed to operations in Scandinavia. He rolls two dice, and the reserve is committed if 8 or greater is rolled. If the reserve is not committed, the Pact player does not receive any strategic reserve forces.

If the strategic reserve is committed, the Pact player receives the reserve's air units as initial air units and the reserve's ground units as reinforcements on the indicated turns. However, the Soviet high command has mandated a general offensive in Scandinavia. The Pact player must declare an outright invasion of Finland on turn 1 and an outright invasion of Sweden by turn 3. Victory is modified as described in rule 20.

D. Norwegian Early Reaction: After all units of both sides are set up, Norwegian units may attempt to move or mobilize.

Norwegian units initially set up may attempt to move. As many or as few units as the NATO player wishes may make the attempt. Units attempt to move one at a time, in any order the NATO player wishes, but one unit must finish moving before another unit attempts to move. To determine if a particular unit may move, roll one die and add three to the result. If the modified roll is less than or equal to the unit's proficiency, the unit may move. If it is greater than the unit's proficiency, the unit remains in place (but there is no other penalty). Units which succeed in moving may move just as in a NATO movement phase, but may not leave Norway. Air and naval transport are not allowed. Pact ZOCs do not extend across the border during this movement.

After all movement attempts have been made, the NATO player may attempt to mobilize Norwegian reinforcements early. To determine if a particular unit may mobilize early, roll one die and add three to the result. If the modified roll is less than or equal to the unit's proficiency, the unit is placed in its mobilization hex. (Map B reinforcements mobilizing early enter on turn 1.) If it is greater than the unit's proficiency, the unit enters play per the standard rules.

E. First Turn Surprise Effects: To simulate Pact tactical surprise, there are two special rules applicable to the first turn. In the first echelon movement phase of the Pact first impulse, NATO ZOCs do not extend across the Pact border. NATO air units may not fly strike missions during the deep strike phase and the strike/interdiction phase of the Pact segment.

RULE 22: NUCLEAR WARFARE (OPTIONAL)

Both sides hold considerable inventories of tactical nuclear

warheads in Europe, and it is distinctly likely that a conventional conflict in Europe would escalate to include the use of these weapons. No game on this subject would be complete without rules for nuclear warfare, and the rules below are extensive.

However, if even tactical nuclear warfare begins, its effects tend to dominate the game, to the exclusion of the more interesting interactions created by the rest of the rules. For that reason, the nuclear rules have been made optional despite our opinions of the true probabilities.

A. Conflict Level: There are six possible levels of nuclear conflict, numbered 0 (no nuclear weapons in use) through 5 (strategic exchange). They differ in the types and quantities of nuclear weapons (nuclear attack points or NAPs) available in each turn and in the limitations placed on their use.

B. Escalation: At the start of the game, the nuclear conflict level is at 0 (no nuclear weapons use). This may change during the game. In the escalation phase of each turn, either player rolls a die. The nuclear warfare table shows, for each level, the die roll needed to escalate to the next level. If the roll is less than or equal to the number shown, the level is increased by one. The new conflict level is in effect until it is altered in a later escalation phase.

C. Types of Nuclear Attacks: Players may receive NAPs of three types: field artillery shells (including short-range missiles), aircraft bombs, and theater level missiles. The number of each type which may be used each turn at each conflict level is shown on the nuclear warfare table. A running total should be kept each turn of points used of each type, to insure that the limit is not exceeded.

1. Field Artillery: Field artillery nuclear attacks include cannon-launched warheads and short-range battlefield rocket and missile systems (such as the NATO Lance missile and the Pact SS-21). Field artillery attacks are used to support ground units engaged in ground combat. Field artillery nuclear attacks may be made during any combat phase. Before each battle is resolved, both players secretly decide whether a nuclear attack will be made and, if so, how many NAPs will be used. The Pact player may use NAPs in a battle only if he has at least one Soviet division involved (attacking or defending). The NATO player may use NAPs in a battle only if he has at least one U.S. unit involved (attacking or defending). The number of points used may be written down on a sheet of paper, players may conceal disruption markers in their hands, or any other convenient means may be used. They are revealed simultaneously. Each NAP used places one disruption upon one involved enemy unit of the using player's choice. No more disruptions may be applied to a single unit than the number of the conflict level. The primary effect of artillery NAPs is to lower the proficiency of enemy units in an attack.

2. Aircraft Bombs: Any air unit with nuclear strike capability (marked with an N on the counter) may carry a number of aircraft bomb NAPs less than or equal to its strike rating. NAPs are used to conduct strike missions. At conflict level 2 only nuclear strike/interdiction missions are allowed. At conflict level 3 and higher, any strike mission may be a nuclear strike mission.

To run a nuclear strike mission, place a *disruption* marker of the correct denomination under the air unit. If no NAPs are to be carried, place another type of marker (*shaken*, *odds*, etc.) under the unit. Nuclear strikes are in addition to the conventional strike run by the air unit. If the air unit is shot down or

aborted, NAPs it carries are lost. If the air unit's rating is halved, the number of NAPs delivered is also halved, rounded to the nearest whole number (although the full number are used up).

a. Logistical Strikes: Nuclear logistical strikes are resolved in the same way as conventional strikes; a die is rolled for each NAP used; the number rolled, however, is not halved but is multiplied by 1.5 (round fractions to the nearest whole number).

b. Runway Cratering: A die is rolled for each NAP used, with the number rolled being the number of hits; for each hit, roll another die; the hit causes a crater on a roll of 1-4 and destroys an air unit on a roll of 5 or 6.

c. Strike/Interdiction: Place a *nuclear strike* marker in the target hex. Each NAP delivered may be used to attack a single enemy unit in the hex, no more than one NAP per unit. For each attack, roll a die for the number of disruptions placed on the unit. Each unit which enters the hex during the next turn is attacked by one NAP.

3. Theater Nuclear Missiles: Theater missile NAPs are intermediate range missiles such as the U.S. Pershing and ground launched cruise missiles and the Soviet SS-20 and SS-22. Also included in the NATO NAPs are Poseidon submarine-launched warheads dedicated to theater tactical support.

All attacks by theater nuclear missiles are conducted as if they were aircraft strike missions except that they may not be shot down, halved, or aborted. Just designate a mission for each NAP and resolve it.

D. Strategic Exchange: Conflict level 5 is a strategic exchange, in which the major nuclear powers will selectively destroy strategic targets in the enemy homeland. This drastic step has several effects. All but the first remain in effect even if the conflict level later de-escalates:

1. Strategic Strikes: Once the conflict level escalates to a strategic exchange, one of each side's cities is hit by a strategic strike per turn. In the escalation phase of each turn, including the phase in which the conflict escalates to level 5, each player writes down the name of one city. Both cities have *devastation* markers placed on them in the next escalation phase, at which time both players write down the name of another city. This continues as long as the game remains at conflict level 5. Any units in the city hex at the time it is devastated are destroyed and removed from play. No unit may enter or move through the devastated hex for the next turn, and entry costs two extra movement points for all units for the remainder of the game; the city is no longer a city for all purposes (air transport, victory, combat effects, etc.). Units may not regroup in devastated cities. Strategic devastation does not use available NAPs.

2. Reinforcements: Neither side receives any additional reinforcements, either ground or air, for the rest of the game. Reinforcements which have not yet arrived are removed from play and, in the case of those countries subject to critical losses, are considered eliminated in combat.

3. Regrouping: Beginning with the first regroup phase after escalation to conflict level 5, and in every subsequent regroup phase for the rest of the game, both players are limited to regrouping a maximum of two units per phase. (Since regrouping simulates not only reorganization but also the absorption of replacements, this reflects the drying up of replacements from home.)

4. Supply: Beginning in the first initial segment after escalation to conflict level 5, and in every subsequent initial segment for the rest of the game, both players roll the die twice to determine supply shortages of their opponent. The first die roll, during the aircraft maintenance phase, is the total number of air units that are grounded for lack of supply that turn. The second die roll, during the supply phase, is for the total number of ground units which are unsupplied that turn. Each player selects which of his own air units will be grounded and which of his opponent's ground units will be unsupplied.

E. Limits on Use: Neither side may target NAPs or strategic devastation against a city hex in a neutral nation, a nation which has surrendered, or a nation currently a friendly belligerent. For example, a NATO attack intended to recapture a Norwegian city could not use field artillery NAPs to disrupt the Pact defenders in that city. However, Pact troops attacking out of such a city against NATO troops could be disrupted by field artillery NAPs.

F. Victory Conditions: The effects of the nuclear rules on game balance are very complex, depending on the exact level reached in each turn. The following constitutes only a simple guideline. If the conflict level reaches 1 but does not go beyond, subtract 2 points from the Pact victory total. Add 1/2 point to the Pact victory total for each turn spent at level 2 or 3. Subtract 1/2 point from the Pact victory total for each turn spent at level 4 or 5. If the conflict level reaches 5, victory is a strange term to use whatever the outcome, but the war continues nonetheless; add 1 point to the Pact victory total for each major city and 1/2 point for each minor city devastated.

RULE 23: U.S. ORDER OF BATTLE (OPTIONAL)

The United States is in the process of raising and training light infantry divisions, in order to have easily-transported formations for use in crisis spots. For the *Third World War* series, both the 6th and 10th Infantry Divisions (Light) are assumed to go to Norway. To explore the effects on the game of these units either not being raised or being disbanded, use the following rule. Remove the U.S. 6th and 10th Light Infantry Divisions from the game, and use the U.S. 172nd Infantry Brigade instead.

RULE 24: WINTER CONDITIONS (OPTIONAL)

The European Arctic has a long, harsh winter, which would have important effects on combat operations there. This rule assumes that the outbreak of war occurred while winter conditions still prevailed in the Arctic. The following effects apply to all hexes and units in the Arctic, while the weather table modifications apply to the entire game.

When using the weather table, add two to both the first and second die rolls. For the first die roll, results above six mean poor weather. For the second die roll, results above 6 mean storms (but not severe storms).

Arctic terrain has somewhat different effects on movement during the winter, due to extensive snow and cold. Swamp hexes and river hexsides are treated as clear terrain. Except for overland units and ski units, all movement point costs are increased by 1 and all wilderness terrain is prohibited to movement.

The maximum advance after combat is 1 hex, regardless of terrain.

ORDERS OF BATTLE

WARSAW PACT ORDER OF BATTLE

Western Strategic Direction

Leningrad Front

2G	TD	9-8-5/3
45	MRD	6-6-5/SU
76G	MAbnD	4-4-7/SU
LF	AmobB	2-3-7/SU
LF	MAbnB	1-1-7/SU
63	MarB	2-3-7/SU

6 Army

45G	MRD	6-6-5/SU
54	MRD	6-6-6/SU
77G	MRD	5-6-4/6
111G	MRD	6-6-5/3

18 Army

37G	MRD	9-9-6/SU
64G	MRD	5-6-4/6
69	MRD	6-6-5/6

Air Units

Northern Theater: 1 Sov Su-27 (5*-0-0-M/4);
1 Sov MiG-23 (3*-0-0-M/4); 1 Sov MiG-27
(1-2-2*-S/4); 1 Sov Tu-22M (0-0-4*-L-N/4)

Turn 3: 1 Sov MiG-21 (2-1-1-S/3)
Turn 4: 1 Sov MiG-21 (2-1-1-S/3); 1 Sov
Su-17 (0-2-2-S/3)

Breakdowns

1/76G	MAbnR	2-2-7/(BD)
2/76G	AbnR	1-1-7/(BD)
3/76G	AbnR	1-1-7/(BD)
1/45	MRR	2-2-5/(BD)
2/45	MRR	2-2-5/(BD)
3/45	oMRR	1-1-5/(BD)
1/54	MRR	2-2-6/(BD)
2/54	MRR	2-2-6/(BD)
3/54	oMRR	1-1-6/(BD)
1/111G	MRR	2-2-5/(BD)
2/111G	MRR	2-2-5/(BD)
3/111G	oMRR	1-1-5/(BD)
1/77G	AtrMRR	2-2-4/(BD)
2/77G	AtrMRR	1-1-4/(BD)
3/77G	AtrMRR	1-1-4/(BD)
1/45G	AtrMRR	2-2-5/(BD)
2/45G	AtrMRR	2-2-5/(BD)
3/45G	AtrMRR	1-1-5/(BD)
1/37G	MRR	4-4-6/(BD)
2/37G	MRR	2-2-6/(BD)
3/37G	MRR	2-2-6/(BD)

Strategic Reserve

Reserve Front

4G	TD	9-8-5/3R
ResF	AmobB	2-3-7/1R

9th Army

15G	TD	9-8-5/3R
2TaG	MRD	9-9-7/1R
8G	MRD	9-9-6/1R
13G	MRD	5-6-4/6R
32G	MRD	5-6-4/6R

12th Army

41	TD	9-8-5/3R
43	MRD	5-6-4/6R
50G	MRD	5-6-4/6R
67	MRD	5-6-4/6R
77	MRD	5-6-4/6R

Air Units

Strategic Reserve: 1 Sov MiG-29
(4*-1-1*-M/4); 1 Sov Su-24 (1-2-3*-M-N/4)

Replacement Air Unit, Western Theater: 1 Sov
Blackjack (0-0-6*-L-N/4)

NEUTRALS ORDER OF BATTLE

Finland

Finnish Army

Arm	AB	2-1-6/FN:G-0122
Ny	SB	1-1-6/FN:F-2425
Porin	SB	1-1-6/FN:F-2122
Kar	SB	1-1-6/FN:G-0325
Sav	SB	1-1-6/FN:G-0524
Poh	SB	1-1-6/FN:G-1015
Kain	SB	1-1-6/FN:G-1018
Jgr	oSB	1-1-8/FN:G-1511

Sweden

Swedish Army

1N	oMB	2-3-7/SW:G-0811
2N	oMB	2-3-7/SW:G-0811
3N	oMB	2-3-7/SW:G-0313
4N	oMB	2-3-7/SW:G-0313
5N	oMB	2-3-7/SW:F-1415
1	AB	2-2-6/SW:F-1420
2	AB	2-2-6/SW:F-0221
3	AB	2-2-6/SW:F-0222
4	AB	2-2-6/SW:F-1319
16	MB	1-3-6/SW:F-1024
17	MB	1-3-6/SW:F-0718
1	IB	1-2-5/SW:F-0518
3	IB	1-2-5/SW:F-0920
4	IB	1-2-5/SW:F-0422
5	IB	1-2-5/SW:F-2113
7	IB	1-2-5/SW:F-1118
9	IB	1-2-5/SW:F-0915
10	IB	1-2-5/SW:F-1218
11	IB	1-2-5/SW:F-1617
14	IB	1-2-5/SW:F-0515
15	IB	1-2-5/SW:F-0219
18	IB	1-2-5/SW:F-1420
20	IB	1-2-5/SW:F-1910

Territorials:

2	IB	0-2-4/1
6	IB	0-2-4/1
8	IB	0-2-4/1
12	IB	0-2-4/1
13	IB	0-2-4/1
19	IB	0-2-4/1

Air Units

Northern Theater: 2 Viggen-F (3*-0-0-M/5);
1 Viggen-F (1-2-2*-S/5)

NATO ORDER OF BATTLE

Norwegian Army

Nord	AB	2-3-7/NO:G-1102
2	AB	2-3-7/1:F-0712
14	AB	1-2-7/NO:F-2403
12	oMB	1-3-7/1:F-1605
15	oMB	2-2-7/NO:G-0902
5	oMntB	2-3-7/NO:G-0502
13	oMntB	1-3-7/NO:F-1805
Finn	oMntR	1-1-7/NO:G-2106
1	IB	1-3-6/1:F-0613
3	IB	1-2-6/1:F-0511
4	IB	0-1-7/1:F-0712
6	IB	1-3-7/1:F-0711
7	IB	1-1-7/1 B-1918
8	IB	1-1-7/1 B-2316

NATO Northern Command

3	oCdoB(B)	1-2-9/1
AMF	oMntB(N)	1-2-8/1
2	MarB(US)	2-4-8/2
5	oIB(Can)	1-2-8/3
6	LID(US)	3-4-7/4
10	LID(US)	3-4-7/5

Air Units

Northern Theater: 1 Nor F-16 (4*-1-2*-M-N/6)

Turn 2: 1 US F-18 (4*-1-3*-M-N/5); 1 US
AV-8B (0-3-2-S/5)

Turn 3: 1 Can F-5 (3-1-1-S/5)

Optional Unit

172	oIB(US)	1-2-6/4
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NOTE

The orders of battle are provided to allow players to determine if they have lost any counters and to allow replacement if this turns out to be the case. Higher-unit organization is given for historical interest.

Ground Unit Format: unit ID; type and size; rating/setup

Air Unit Format: unit type (rating)

Unit ID Abbreviations: (B): British; (Can): Canadian; (N): NATO

Unit Type Abbreviations: A: Armored, Abn: Airborne, AtrMR: Amphibious-trained Motorized Rifle, Amob: Airmobile, Cdo: Commando, I: Infantry, LI: Light Infantry, M: Mechanized, MAbn: Mechanized Airborne, Mar: Marine, Mnt: Mountain, MR: Motorized Rifle, o: overland, S: Ski, T: Tank

Unit Size Abbreviations: R: Regiment, B: Brigade, D: Division

RULES

Victory (20A): The Pact player receives one victory point for each airfield he controls.

COUNTERS

The neutral reaction chit counter for Swedish limited participation should read "turn 3", not "turn 2".

The Swedish 2nd Armored Brigade's setup is G0211, not F0211.

The Tu-22M's strike rating should have all-weather capability.

CHARTS

On the unit types chart, the air transport cost for mechanized infantry/motorized rifle should be 5, not 4.

On the combat results table, the combat result for a roll of 2 at 8:1 odds should be D/4DR, not —/4DR.

EXPANDED SEQUENCE OF PLAY

Note: Numbers and letters in parentheses refer to the relevant rules and rules sections.

INITIAL SEGMENT

Neutral Activation Phase

Announce invasion or entry into the war of neutrals (17).

Aircraft Maintenance Phase

1. Receive new air units (15).
2. Roll for maintenance (9B).
3. Destroy and ground air units due to craters and other causes (9E2, 14, 20D, 22D4).
4. Repair craters (9C).
5. Consolidate losses (9J).

Weather Determination Phase

Roll for weather (12).

Theater Air Superiority Phase (9D)

1. Pact places air units in *air superiority* box.
2. NATO places air units in *air superiority* box.

Deep Strike Phase (9E2, 9E3)

1. Pact assigns deep logistical strikes, runway cratering, and escort missions.
2. NATO intercepts and assigns deep logistical strikes, runway cratering, and escort missions.
3. Pact intercepts.
4. Resolve air combat (9G), air defense fire (9H), and missions.

Supply Phase (13)

1. Determine how many Pact brigades are unsupplied. NATO determines which ones.
2. Determine how many NATO brigades are unsupplied. Pact determines which ones.
3. Pact determines any emergency supply priorities.
4. NATO determines any emergency supply priorities.

Critical Loss Determination Phase

NATO player determines whether any NATO countries have suffered critical losses (18).

PACT SEGMENT

Norwegian Sea Control Phase (11C)

Players determine which side controls the Norwegian Sea.

Strike/Interdiction Phase (9E2, 9E3)

1. Remove *strike* markers left from this phase last turn.
2. Pact declares strikes and escorts.
3. NATO intercepts and declares strikes and escorts.
4. Pact intercepts.
5. Resolve air combat (9G), air defense fire (9H), and missions.

Pact First Impulse

First Echelon Sub-Impulse

Movement Phase (5)

Move Pact units, including air transport (10) and naval transport (11); airborne assaults may be escorted and intercepted by air units; units may breakdown/buildup (16C). Pact receives new ground units during this phase (15).

Combat Phase (6)

1. Announce all attacks and mark odds (6C).
2. Resolve attacks one by one.
 - a. Pact declares ground attack and top cover missions (9E1, 9E3).
 - b. NATO declares ground attack and top cover missions.
 - c. If Pact did not declare a ground attack in step a, Pact may declare top cover now.
 - d. (Optional) Both sides commit and resolve artillery NAPs (22C1).
 - e. Resolve air combat (9G) and air defense fire (9H).
 - f. Recompute odds and resolve attack (6D4).

Second Echelon/Breakthrough Sub-Impulse

Only units which do not begin the sub-impulse in enemy ZOCs may move or attack in this sub-impulse.

Movement Phase

Combat Phase

Regroup Phase

All Pact units which did not move or attack in the first impulse and are not in an enemy ZOC may regroup (7).

NATO Reserve Impulse

Only NATO units which do not begin the impulse in enemy ZOCs may move or attack in this impulse.

Movement Phase (5)

Move NATO units; no air or naval transport may be performed.

Combat Phase (6)

1. Announce all attacks and mark odds (6C).
2. Resolve attacks one by one.
 - a. Pact declares ground attack and top cover missions (9E1, 9E3).
 - b. NATO declares ground attack and top cover missions.
 - c. If Pact did not declare a ground attack in step a, Pact may declare top cover now.
 - d. (Optional) Both sides commit and resolve artillery NAPs (22C1).
 - e. Resolve air combat (9G) and air defense fire (9H).
 - f. Recompute odds and resolve attack (6D4).

Regroup Phase

All NATO units which did not move or attack in the reserve impulse and are not in an enemy ZOC may regroup.

Pact Second Impulse

This impulse is identical to the Pact first impulse except that new units are not received.

NATO SEGMENT

Strike/Interdiction Phase

This phase is identical to the one in the Pact segment.

NATO First Impulse

Movement Phase (5)

Move NATO units, including air transport (10) and naval transport (11); airborne assaults may be escorted and intercepted by air units. NATO receives new ground units during this phase (15).

Combat Phase (6)

1. Announce all attacks and mark odds (6C).
2. Resolve attacks one by one.
 - a. Pact declares ground attack and top cover missions (9E1, 9E3).
 - b. NATO declares ground attack and top cover missions.
 - c. If Pact did not declare a ground attack in step a, Pact may declare top cover now.
 - d. (Optional) Both sides commit and resolve artillery NAPs (22C1).
 - e. Resolve air combat (9G) and air defense fire (9H).
 - f. Recompute odds and resolve attack (6D4).

Regroup Phase

This phase is identical to the one in the NATO reserve impulse.

NATO Second Impulse

This impulse is identical to the NATO first impulse except that new units are not received.

NATO Surrender Phase

Determine if any NATO country surrenders (19).

FINAL SEGMENT

Aircraft Landing Phase

All air units in the *air superiority* box return to the *flown* box and transfer missions occur; Pact units transfer first (9L).

Unsupplied/Grounded Recovery Phase

Unsupplied and grounded units return to normal (13, 14).

Escalation Phase (optional)

Roll to determine if nuclear escalation occurs (22B).

ARCTIC FRONT

Battle for Norway

BRIEFING SHEET

THE WAR IN THE NORTH

1990: Numerous power factions have been jostling for supremacy in Iran in the period following Khomeini's death. By 1990, both superpowers are deeply involved, as each fears the consequences should a regime favorable to the other gain control of Iran. Each power recognizes a particular faction as the true government of Iran. As conditions deteriorate, both sides escalate their support of the factions, up to and beyond the point of direct conflict between Soviet and U.S. forces sent to Iran. The alliances of the superpowers (NATO and the Warsaw Pact), responding to the situation, begin to mobilize. Once it appears that the conflict will spread, the forces of the Warsaw Pact attack NATO. (Pact doctrine emphasizes the offensive and the rapid defeat of enemies; thus, the Pact will not stand on the defensive and allow NATO to seize the initiative once hostilities seem unavoidable, as explained in the briefing booklet in *Third World War*.)

The above is a likely scenario for the outbreak of another world war. Starting in the volatile Middle East, the conflict drags in the superpowers and their allies, and leads to a general war in Europe. The *Third World War* series of games covers the major theaters of operations of a hypothetical war at the beginning of the next decade. *Third World War*, the first game in the series, covers central Europe, the major theater of operations; *Southern Front*, the second game, covers operations on NATO's southern flank. This game, *Arctic Front*, covers the conflict in Scandinavia.

The Arctic theater is quite different from the other European theaters. The region is important strategically, due to naval considerations. In order to disrupt NATO's sea communications and control of the North Atlantic Ocean, the Soviet Red Banner Northern Fleet must sail from its Arctic ports on the Kola Peninsula through the Greenland-Iceland-United Kingdom gap into the Atlantic. NATO naval forces will try to prevent this, turning the seas off Norway into a battlefield. The airfields of northern Norway are important to this battle: if Soviet naval aviation can use them and thus command the air above the seas, the prospects for Soviet naval victory are aided substantially.

To seize the airfields, the Pact has a small but specialized force supported by strong air assets. NATO's opposing force is also small, but highly capable. Both sides, plus neutral Finland and Sweden, field contingents of specially equipped and/or trained troops capable of operating in the wilderness regions. Other specialized forces include marines, airborne troops, mountain troops, and commandos.

The terrain of the theater is often harsh: near-roadless wilderness and mountains, some of the worse terrain of Europe. All the elements — terrain, specialized troops, small contingents, neutrals — in the game result in a campaign that is quite different from the troop-dense central Europe or the open-flank southern Europe theaters.

NOTES

Basic design decisions and similar matters are covered in the briefing booklets in *Third World War* and *Southern Front*, and

players should consult those booklets for details. Questions specific to *Arctic Front* are discussed below.

Why is the Pact amphibious capabilities different in this game from the others?

In the other theaters, the Pact had insufficient amphibious vessels to conduct a single-lift assault with an entire marine division. In the Arctic, there are sufficient vessels for the marine brigade there to conduct a single-lift assault; thus, it is allowed to make opposed landings. The "amphibious-trained" motorized rifle divisions have a limited amphibious ability, as they use ro-ro ships (roll on, roll off) as their lift. These vessels are less capable than amphibious vessels and thus can only make uncontested landings at ports.

Why do Soviet divisions break down the way they do?

These divisions break down into operational combat-worthy "regimental groups" rather than along pure organizational lines. Thus, a division breaks down into three combined-arms motorized rifle regimental groups, not three (weaker) motorized rifle regiments and one tank regiment. Also, the unit identification numbering for these breakdown regiments is simplified (each division breaks down into regiments numbered "1" through "3"). Actually, each Soviet regiment has its own individual numbering.

Why weren't the U.S. 6th and 10th Light Infantry Divisions printed in their correct colors in Third World War for use in this game?

The U.S. Army changed its plans and order of battle significantly in this area in the time between publication of *Third World War* and *Arctic Front*. Optional rule 23 shows the situation prior to the change. These two divisions will be printed in U.S. colors in *Persian Gulf*.

Is there a national color for the NATO ACE mobile force unit?

No. The ACE (Allied Command Europe) mobile force is a formation composed of smaller formations from several NATO nations. It has no national color because it is not a national unit — which means that it is always affected by the NATO different nationalities stacking rule, regardless of which NATO units it stacks with.

What do the wilderness terrain types represent?

Use of the local road net is very important in modern military operations. In northern Europe, unlike the rest of Europe, there are large areas with very poor or non-existent road nets. These areas are shown as wilderness on the map.

Why does Norway receive an early reaction rule?

The Norwegian army is highly motivated and has a fast, efficient mobilization procedure. Since the Warsaw Pact attack is not a strategic surprise, the rule accounts for the possibility of Norway going to a high state of military preparedness before the invasion.

Why are ports and airfields named on the maps, while only cities are named on the maps in the other two games?

Unlike the other games, in this game there are very few cities. Naming the ports and airfields gives the maps more "character" and more places for players to recognize. Knowing that you're defending "Bardufoss" as opposed to "hex G-1102" gives a better feel for the situation.

PLAYERS' NOTES

Warsaw Pact: The Pact player should start the game pushing hard. The Pact starts with superior numbers of ground troops and aircraft and must use this advantage to gain objectives

quickly before NATO's defense hardens. The goal for the first turn is to try to break into the Narvik-Bardufoss area. The mountains and fjords of this region make it a natural fortress: the only entries into the area are across the fjord at G-1401/G-1502 and through the mountain pass at G-1404. If NATO is given time to concentrate sufficient troops in this region, the Pact will find it difficult or impossible to break in. Thus, on the first turn, the Pact should use its forces to the maximum: a general ground advance, passage through the Finnish Arctic, airmobile operations, airborne landings, amphibious operations. Interdiction of Narvik by the Backfire (Tu-22M) air unit can be helpful, as most of NATO's reinforcements to northern Norway will have to pass through this chokepoint.

After the initial big push, the Pact advance will slow down in the face of rugged terrain, the narrow front in Norway, and high-proficiency NATO troops. Once this occurs, the Pact will gain ground very slowly, by grinding down NATO's front line with well-supported attacks.

In the air, the Pact starts with the advantage of numbers, but this superiority is fragile. There simply aren't enough air units in the theater to do everything that needs doing: interdiction, runway cratering, ground support, and escorting airborne operations. Careful management of air assets is vital.

The Scandinavian neutrals present a number of problems. The Pact will almost certainly have to violate Finland's neutrality by seeking Arctic passage to reach the start of the mountain pass in G-1404. If Finland joins NATO in response, the turn 3 reinforcements are best used to try to force Finland to surrender. The Finnish army isn't much of a threat, but it can cut Pact communications in the Arctic if the Pact player isn't careful. Due to the size of the Swedish armed forces, Sweden is best left alone. However, if the front has stalemated in the Norwegian Arctic, passage through the Swedish Arctic becomes a tempting outflanking move. It is also a dangerous move, for if Sweden joins NATO in response then the Pact will have a difficult open flank to defend.

If the Warsaw Pact strategic reserve is committed to Scandinavia, then the game changes its nature significantly. The initial operations against Norway remain the same, for the same reasons. Finland should be invaded and conquered by the Pact turn 1 reinforcements. Major forces should be assembled for the invasion of Sweden on turn 3. By rapidly pushing through north and central Sweden, the entire Scandinavian peninsula can be threatened by substantial Pact forces.

NATO: The Norwegian early reaction must be used to try to form a strong crust of the Narvik-Bardufoss fortress area. The troops that begin here are insufficient for this task, but they must try to hold out until reinforcements arrive. Overall, NATO's ground asset is proficiency: NATO units have higher proficiencies (in some cases, much higher) than Pact units. When used in conjunction with defensible terrain, NATO can hope to halt the Pact drive, perhaps with significant proficiency losses to the Pact.

The non-Norwegian NATO troops are very helpful. Their proficiencies make them the elite troops in the game, and their special abilities are very useful. In particular, the amphibious abilities of the U.S. marines and British commandos can make the Pact's Norwegian Sea flank insecure, requiring garrisons to guard rear area ports and airfields. The one drawback with these troops is their diverse nationalities. This can cause stacking problems, particularly in the Arctic; the NATO player thus

must carefully manage their employment.

In the air, NATO has a quantitative disadvantage. However, the quality of NATO's air units is seldom matched or surpassed by Pact air units. This allows NATO to pick away at the Pact air power, by bouncing the weaker units. Also, the Pact doesn't have enough air units to meet all its combat needs, so NATO air units will be able to intervene on the battlefield once the Pact has shot its bolt for the turn. If all goes well, air superiority will shift to NATO in the latter part of the game.

LEARNING ARCTIC FRONT IF YOU ALREADY KNOW THIRD WORLD WAR

The basic rules of *Arctic Front* are the same as those in *Third World War*. Instead of reading through the entire rules booklet, check section C2 of the combined play rules; this paragraph points out where the changes between the two games are in the *Arctic Front* rules booklet.

THIRD WORLD WAR, SOUTHERN FRONT, AND ARCTIC FRONT: COMBINED PLAY

Third World War, *Southern Front*, and *Arctic Front* may be combined and played.

A. Maps: All seven maps are used in combined play. The maps are assembled as specified in the rules for the three games. Then, the northern edge of map C is placed adjacent to the southern edge of map A. Finally, the south-southeastern edge of map F overlaps the northeastern edge of map B at a 60° angle.

B. Setup: All units are set up as specified in the setup rules of the three games. All Italian reinforcements which appear in *Third World War* are initially deployed in the following hexes of map C: Fri Motorized Brigade: 3103; Ac Motorized Brigade: 2505; Aosta Motorized Brigade: 0905; GdS Mechanized Brigade: 2504; Pin Mechanized Brigade: 1912; Fol Airmobile Brigade: 3101. The Pact player does not roll for commitment of the strategic reserve. Instead, he may commit the reserve as he wishes, placing the reserve's air units in any theaters initially and entering the reinforcements as Soviet reinforcements in any of the games.

C. Rules: The rules of *Third World War* are used to play the game, with additional rules from *Southern Front* and *Arctic Front*.

1. Southern Front Rules: The following rules from *Southern Front* are used: 4A (special sized divisions), 6B (the Bosphorus), 8B (communications sources for the Balkans), 9J (the F-14), 11A (one-hex islands being ports), 11B (amphibious evacuations), 11C (the Turkish Straits), 11D (adjacent ports), 15 (appearance/entry rules for units in *Southern Front*), 16 (Jugoslavian partisans), 18 (vulnerable nations in the Balkans), 18E (Romanian unreliability), 19 (Balkan nations which surrender), and 21 (setup for forces in *Southern Front*). The various Greek/Turkish restrictions from *Southern Front* are used from rules 4B, 5B, 6B, and 7C. Note: Rules modifications from *Southern Front* apply to the whole combined game, not just to the portion of the game corresponding to the *Southern Front* maps.

2. Arctic Front Rules: The following rules from *Arctic Front* are used: 3B (wilderness hexes and ZOCs), 4A (special sized divisions), 4B (wilderness and Arctic stacking limits), 5D (wilderness hexes and overland units), 6B (attacking in wilderness), 8B (communications sources for Scandinavia), 11A (naval transport in Scandinavian waters), 11C (the Norwegian Sea), 15 (appearance/entry rules for units in *Arctic Front*), 16 (Swedish territorials, Finnish partisans, and Soviet divisional breakdowns), 17 (Scandinavian neutrals), 18 (vulnerable nations in Scandinavia), 19 (Scandinavian nations which surrender), 21A&B (setup for forces in *Arctic Front*), and 21D (Norwegian early reaction).

The *Third World War* sequence of play is used, with the Black Sea Fleet sortie/Norwegian Sea control phase added to the start

of the Warsaw Pact segment.

A few rules are modified when playing the two games together:

There are four air theaters: Northern, Western, Southwestern, and Balkan. The theaters are as described in the three sets of rules, except that the Baltic and North Sea naval zones are part of the Western theater while all of Norway and Sweden are part of the Northern theater. The Southwestern theater was split by two games and now consists of the portions from each game. Long-range air units may fly missions in the theater they occupy or any adjacent theater (only). Intercontinental-range air units may fly missions in any theater. When transferring from the available box, air units may transfer to any theater. When transferring after flying a mission or returning from an abort, medium-range air units may transfer to an adjacent theater, and long- and intercontinental-range air units may transfer to any theater.

The players use the sum of the air transport points available to them in the three games. Thus, in the combined game NATO has 15 per NATO first and second impulse and the Pact has 31 per Pact first and second impulse.

NATO units may use naval transport between the North Sea/Norwegian Sea and Central Mediterranean/Aegean/Straits naval zones. One full turn is required for such movement. For example, if a NATO unit left a North Sea port in the movement phase of the NATO first impulse of turn 2, it would arrive at a Central Mediterranean port in the movement phase of the NATO first impulse of turn 3.

Instead of one weather roll per turn, the die is rolled separately for each of the four theaters. Thus, it is possible for different weather conditions to prevail in different places on the map. Air units are affected by the weather in the theater in which their mission takes place. However, no aircraft may fly into or out of a theater which has severe storms. Amphibious invasions are affected only by the weather in the theater in which the invasion attempt is made. Airmobile units which spend any of their movement in a theater suffering severe storms have their movement allowance for the movement phase reduced to 3. Airmobile units have only a standard ZOC (instead of an airmobile ZOC) if the unit or the ZOC hex is in a theater suffering severe storms.

When using the nuclear warfare rule, the rule in *Third World War* is used (thus allowing restraint and deliberate escalation). However, the number of NAPs available to a player at a given level is the sum of the NAPs available to the player at that level in each game. A side may use artillery NAPs if it has at least one of the following units involved in the combat: any division from a NATO country in *Third World War* (note that this does not include divisions of neutrals that join NATO), any division from a Pact country in *Third World War*, and any U.S. brigade. At conflict level 5, three cities per side are hit by strategic strikes. Also, the die is rolled six times to determine supply shortages for each side: three times for air units and three times for ground units.

D. Yugoslavia: The Yugoslavia chits from *Third World War* are used. Otherwise, the rules on Yugoslavia from *Southern Front* are used: partisans, critical loss levels, and vulnerability to surrender.

E. Victory: Victory points are received the same as in *Third World War*, except that the Pact receives victory points for forcing neutrals to surrender, for having the Black Sea Fleet

sortie per *Southern Front*, and for controlling airfields per *Arctic Front*. Victory points gained by the Pact on all maps are added together to determine the Pact total. The total is then compared to the following table:

Victory Points	Result
59 or less.....	NATO overwhelming victory
60-83.....	NATO substantial victory
84-106.....	NATO marginal victory
107-128.....	Pact marginal victory
129-156.....	Pact substantial victory
157 or more.....	Pact overwhelming victory

F. Scenarios: The standard game or extended game may be played as a combined game. When playing the extended game, the NATO player rolls three times the number of dice normally required in *Third World War* for the Pact logistical breakdown.

G. Counters: The gray colored counters in *Southern Front* and *Arctic Front* which have corresponding national-colored units in *Third World War* are put aside and the national-colored units are used instead. The U.S. 172nd Infantry Brigade counter is not used at all, unless optional rule 23 from *Arctic Front* is used.

Combat Results Table

Die Roll	1:5	1:4	1:3	1:2	1:1	1.5:1	2:1	3:1	4:1	5:1	6:1	7:1	8:1	9:1	10:1
1	E/-	4D/-	4D/-	2D/-	2D/-	2D/-	D/-	D/D	D/D	-/R	-/DR	-/2DR	D/3DR	-/4DR	-/E
2	E/-	4D/-	3D/-	2D/-	2D/-	D/-	D/D	D/D	-/R	-/DR	-/2DR	D/3DR	-/4DR	-/4DR	-/E
3	4D/-	3D/-	2D/-	2D/-	D/-	D/D	D/D	-/R	-/DR	-/2DR	D/3DR	D/4DR	-/4DR	-/4DR	-/E
4	3D/-	2D/-	2D/-	D/-	D/D	D/D	-/R	-/DR	-/2DR	D/3DR	D/4DR	-/4DR	D/E	-/E	-/E
5	3D/-	2D/-	D/-	D/D	D/D	-/R	-/DR	-/2DR	D/3DR	D/4DR	-/4DR	D/E	-/E	-/E	-/E
6	2D/-	D/-	D/D	D/D	-/R	-/DR	-/2DR	EX	EX	EX	D/E	-/E	-/E	-/E	-/E

Notes: Final odds (after air missions) of greater than 10:1 are resolved at 10:1; final odds of less than 1:5 are resolved at 1:5. Results to the left of the slash apply to the attacker; those to the right apply to the defender. EX (Exchange) applies to both.

Results: E: Eliminated. R: Retreat. D: Disrupted. 2D, 3D, 4D: Disrupted 2, 3, and 4 times. -: No effect.

Proficiency Modifiers

Difference	Modifier
greater than 0 but less than 2.....	1 odds levels
at least 2 but less than 4.....	2 odds levels
at least 4 but less than 6.....	3 odds levels
at least 6.....	4 odds levels

Division Size

Divisions	Brigades
US light infantry	2
All others	3

Weather Table

Die Roll	1st Roll	2nd Roll
1	Clear	Overcast
2	Clear	Overcast
3	Clear	Overcast
4	Clear	Overcast
5	Poor	Storm
6	Poor	Severe Storm

Stacking Limits

Terrain	Brigades
Most.....	10
Swamp.....	7
Mountain Pass.....	4
Mountain.....	3
Wilderness.....	3
Arctic.....	3
Arctic Mountain.....	1
Arctic Wilderness.....	1
Arctic Mountain Pass..	1

Note: Subtract 3 from the above numbers if more than one NATO country or Pact army in hex.

Nuclear War Table

Level	Esc Roll	NATO NAPs			Pact NAPs		
		Arty	Air	Mis	Arty	Air	Mis
0	1	0	0	0	0	0	0
1	1	1	0	0	2	0	0
2	2	2	1*	0	3	1*	0
3	3	3	2	0	4	2	0
4	3	2	2	1	2	2	2
5	—	1	1	0	1	1	1

Notes: *No deep strikes allowed.

Level: Conflict Level, Esc: Escalation, Arty: artillery, Air: aircraft bombs, Mis: Missiles.

Critical Loss Table

Country	Shaken	Demor.
Finland	3	6
Norway	9	14
Sweden	10	20

Air Combat Table

Die Roll	Air Superiority Rating				
	1	2	3	4	5
1	—	—	—	—	H
2	—	—	—	H	A
3	—	—	H	A	SH
4	—	H	A	SH	SH
5	H	A	SH	SH	SX
6	A	SH	SX	SX	SX
7	SX	SX	SX	SX	SX

Add 1 to the die roll in the second round.

Results: H: Halved, A: Aborted, SH: Shot down and halved, SX: Shot down immediately.

Norwegian Sea Control Table

Dice Roll	Result
2	NATO control
3	NATO control
4	NATO control
5	NATO control
6	NATO control
7	NATO control
8	Disputed
9	Disputed
10	Pact control
11	Pact control
12	Pact control

Add 1 to the dice roll for each Pact controlled airfield.

Air Defense Fire Table

Die Roll	GA	S/I	RC	LS	AA
1	—	—	—	—	—
2	—	—	—	—	—
3	—	—	—	—	—
4	—	—	—	—	—
5	A	H	A	—	A2D
6	SH	A	SH	A	AD

Airborne Assault Missions: Add 1 to the die roll if the attempted landing is in an enemy ZOC.

Results: H: Halved, SH: Shot down and halved, A2D: aborted and disrupted twice, AD: Aborted and disrupted.

Missions: GA: Ground attack, S/I: Strike/interdiction, RC: Runway cratering, LS: Logistical Strike, AA: Airborne assault

TERRAIN EFFECTS CHART

Third World War Series

Terrain Type	Movement Cost				Combat Effect	Advance (Hexes)
	Mech	Mot	Airmob	Leg		
Hexes						
Clear	1	1	1	2	None	2
Woods	1	1	1	2	Airmobile ¹ units halved. Air missions halved.	2
Rough	1	1	1	2	None	1
Woods + Rough	2	2	1	2	– 1 odds level. Airmobile ¹ units halved. Air missions halved.	1
Swamp	2	2	1	2	Mech units (mobility class) halved	1
Sand	1	2	1	2	None	
Mountain Pass	2	2	1	2	– 2 odds levels	1
Mountain	P/3 ²	P	2	P/3 ²	– 2 odds levels. Only airmobile ¹ and mountain units may attack.	1
Wilderness Clear	3/1 ³	3	1	3/2 ²	As Clear	1
Wilderness Woods	3/1 ³	3	1	3/2 ²	As Woods	1
Wilderness Rough	3/1 ³	3	1	3/2 ²	As Rough	1
Wild. Woods + Rough	P/2 ³	P	1	3/2 ²	As Woods + Rough	1
Wilderness Swamp	P/2 ³	P	1	3/2 ²	As Swamp	1
Wilderness Sand	3/1 ³	3	1	3/2	As Clear	
Full Sea	P	P	1	P	Combat impossible	—
Partial Sea	NE	NE	NE	NE	None	NE
Minor City	NE	NE	NE	NE	– 1 odds level	1
Major City	NE	NE	NE	NE	– 2 odds levels. Units in major cities ignore retreat results. Units which enter a major city may end their retreat.	1
Port	NE	NE	NE	NE	None	NE
POMCUS	NE	NE	NE	NE	None	NE
Airfield	NE	NE	NE	NE	None	NE
Oilfield	NE	NE	NE	NE	None	NE
Hexsides						
Minor River	NE	NE	NE	NE	– 1 odds level if all attackers are attacking across a river.	NE
Major River	+1	+1	NE	+1	All units except airmobile ¹ halved. – 1 odds level if all attackers are attacking across a river.	1 ⁵
Salt Waste	P	P	1	P	All except airmobile ¹ prohibited	NE
Full Sea or Lake	P/+2 ⁴	P	NE	P	Airmobile ¹ and amphibious units halved. All other prohibited.	1
Bridge	+1	+1	NE	+1	Airmobile ¹ and amphibious units halved. All other prohibited.	1
Border	NE	NE	NE	NE	None	NE
Kurdish Border	NE	NE	NE	NE	None	NE
Arctic Line	NE	NE	NE	NE	None	NE
Zones of Control						
Standard	+1	+2	NE	+2	None	NE
Airmobile	+2	+2	+2	+2	None	NE

¹Airmobile mobility class. ²Mountain and ski units. ³Overland and light motorized units. ⁴Amphibious units only. ⁵Airmobile units may advance 2 hexes. NE: No effect. P: Prohibited.

Third World War Series: This chart contains information applicable to the entire series. No individual game necessarily uses all the information.

UNIT IDENTIFICATION CHART

Third World War Series

Unit Types

Symbol	Type	Mobility Class	ATC*
	Airmobile Infantry, Air Assault	Airmobile	4
	Attack Helicopter	Airmobile	4
	Armor, Tank, Panzer	Mechanized	5
	Mechanized Infantry, Motorized Rifle, Panzergrenadier	Mechanized	5
	Armored Cavalry, Reconnaissance	Mechanized	5
	Light Motorized	Mechanized	2
	Mechanized Airborne, Desant	Mechanized	2
	Amphibious, Marine, Naval Infantry	Mechanized	2
	Overland Mechanized/Motorized Rifle	Mechanized	5
	Amphibious-trained Motorized Rifle	Mechanized	5
	Overland Infantry	Mechanized	2
	Overland Mountain	Mechanized	2
	Overland Commando	Mechanized	2
	Overland Ski	Mechanized	2
	Motorized Infantry	Motorized	2
	Infantry, Light Infantry	Leg	1
	Mountain	Leg	1
	Airborne, Parachute	Leg	1
	Ski	Leg	1
	Border	Leg	1
	Commando, Ranger	Leg	1

*ATC = Air Transport Cost. Cost is per brigade. Double cost for airborne assault.

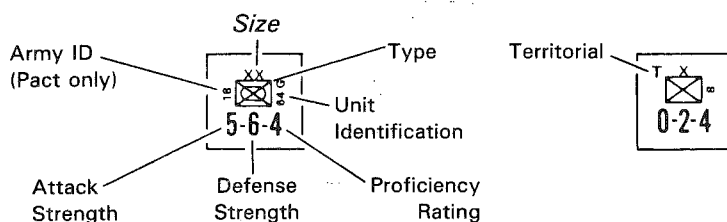
Unit Sizes

XX	Division
X	Brigade
III	Regiment

Markers

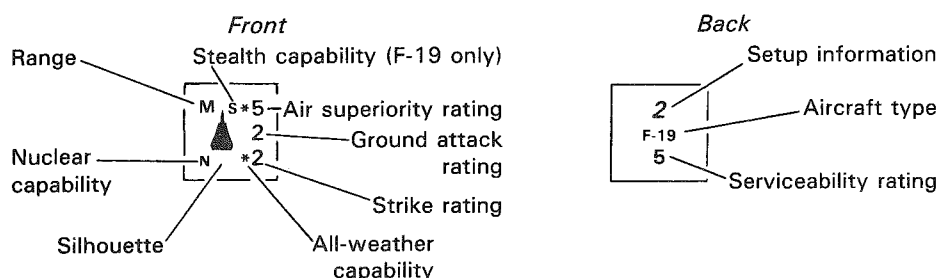
	Disruption
	Strike
	Nuclear Strike
	Devastated City
	Unsupplied
	Odds
	Shaken
	Demoralized
	Crater Track (1's)
	Crater Track (10's)
	Destroyed on Runway
	POMCUS
	Neutral Reaction Chit
	Turn Marker
	Diplomacy Track Marker

Ground Unit Information



The back of the counter provides setup information.

Air Unit Information



Third World War Series: This chart contains information applicable to the entire series. No individual game necessarily uses all the information.

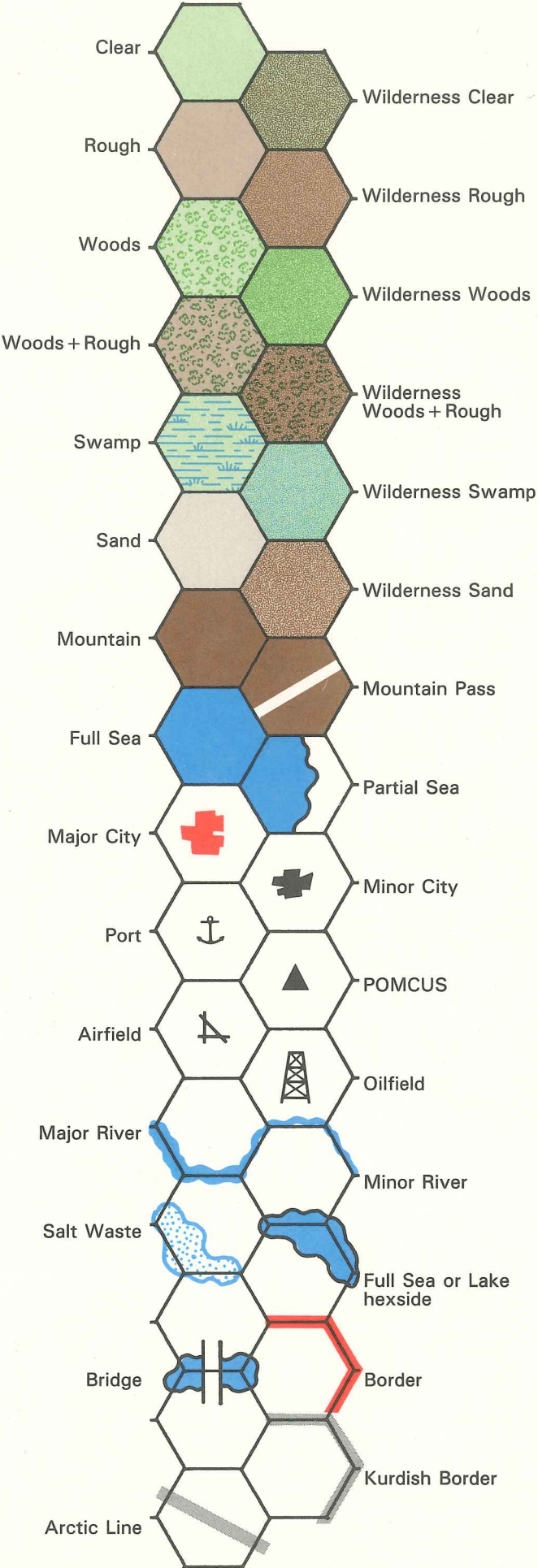
Aircraft Status Chart
Northern Theater

Air Superiority	
Available	
Flown	
Shot Down	Grounded

**Crater
Track**

0
1
2
3
4
5
6
7
8
9

Map Legend: Third World War Series



Arctic Front

2-3-7	2-3-7	2-3-7	2-3-7	2-3-7	2-2-6	2-2-6
2-2-6	2-2-6	1-3-6	1-3-6	1-2-5	1-2-5	1-2-5

1-2-5	1-2-5	1-2-5	1-2-5	1-2-5	1-2-5	1-2-5
1-2-5	1-2-5	0-2-4	0-2-4	0-2-4	0-2-4	0-2-4

0-2-4	0-2-4					
0-2-4	0-2-4					

2-1-6	1-1-8	1-1-6	1-1-6		
1-1-6	1-1-6	1-1-6	1-1-6		

3-4-7	3-4-7	2-4-8	1-2-6	1-2-8	1-2-9	1-2-8
1-2-8	1-2-8	1-2-8				

6-6-5	6-6-5	6-6-6	6-6-5	5-6-4	9-9-6	5-6-4	6-6-5
9-9-7	9-9-6	5-6-4	5-6-4	5-6-4	5-6-4	5-6-4	5-6-4

9-8-5	9-8-5	9-8-5	9-8-5	4-4-7	2-3-7	2-3-7	1-1-7
2-3-7	2-2-7	1-1-7	1-1-7	2-2-5	2-2-5	1-1-5	2-2-6

2-2-6	1-1-6	2-2-5	2-2-5	1-1-5	2-2-4	1-1-4	1-1-4
2-2-5	2-2-5	1-1-5	4-4-6	2-2-6	2-2-6	2-2-6	2-2-6

2-2-6	2-2-6	2-2-6	2-2-6			
2-2-6	2-2-6	2-2-6	2-2-6			

2-3-7	2-3-7	1-2-7	1-3-7	2-2-7	2-3-7	1-3-7	1-1-7
1-3-6	1-2-6	0-1-7	1-3-7	1-1-7	1-1-7	1-1-7	1-1-7

