

Operational Combat Series:

Charts & Tables

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Outline Sequence of Play

I. Overphase

1. Weather Determination Segment
2. Supply Usage Segment
3. Reinforcement Placement Segment
4. Replacement Reorganization Segment
5. First Player Determination Segment

II. Player Turn One

1. First Player

- A. Air Unit Return
- B. Air Unit Refit
- C. Mode Determination
- D. Movement
- E. Reaction

Movement Segment
Barrage Segment
Combat Segment

F. Combat

Barrage Segment
Combat Segment

G. Exploitation

Movement Segment
Barrage Segment
Combat Segment

H. Clean Up

2. Second Player

Repeat the steps of the first player with the roles of phasing and non-phasing player reversed.

III. Player Turn Two

Repeat Player Turn One's sequence.

IV. Turn End Phase

Actions that cannot be taken in hexes adjacent to enemy units:

- A. Truck MP type movement.* Friendly units negate this provision.
- B. Rail Transport. Friendly units may **not** negate this provision.
- C. Supply Line Trace. Friendly units negate this provision.
- D. Rail Repair operations. Friendly units may **not** negate this provision.

(MP types are explained in 6.2, shown on the counter by color, and may be different from one side of the counter to the other.)

Friendly units used to negate any of the above may not be moving *with* the units for which they are negating. In other words, a hex may be negated by a friendly unit which started out in or moved into the hex (and ceased its movement earlier in the same phase), but never one which is moving along with the units which need the negation.

*Units using truck MPs may move *into* a hex adjacent to an enemy unit, but must either halt for the phase at that point or conduct an overrun. Such units starting the turn adjacent to enemy units may exit that hex and move until they enter another hex adjacent to the same or different enemy units.

Air Unit Refit Table

Roll one Die for each Supplied, Friendly Airbase:

Number Refit = Die Roll x Usable Base Level

Example: A roll of 3 on a fully-supplied level 3 base would allow 9 air units to refit. A roll of 3 at the same base with only 2 usable levels (that part which had SPs expended for it) would allow 6 air units to refit.

The owning player decides which air units to refit.

Air Phasing Summary

Unit	Move up to max range to attack targets or enter station ¹	Return in Return Segment?	Execute Barrage Attack? ²
Active at a supplied friendly base	Yes	No	Yes
Active (elsewhere)	No	Yes	Yes
Inactive	No	No	No

Notes:

1—Allowed in Movement, Reaction, and Exploitation Phases for the appropriate player

2—Allowed in the Movement, Reaction, Combat, and Exploitation Phases for the appropriate player

Phase	Move up to Range	Deploy 5 Hexes to Intercept Moving Enemy A/C
Movement	Phasing A/C	Non-Phasing A/C
Reaction	Non-Phasing A/C	Phasing A/C
Combat	No	None
Exploitation	Phasing A/C	Non-Phasing A/C

Note: Phasing Air Units may deploy and wait for the friendly Combat Phase to execute their Barrage Attack so as to assist with artillery. In doing so, they run the risk of being attacked by enemy aircraft during the Reaction Phase and not being able to participate in the barrage at all. Alternatively, air units may execute their barrage at the very end of the Movement Phase, avoiding the enemy Reaction Phase but failing to coordinate their attack with artillery.

Air to Air Combat Table

Modified Dice Roll	Result
4 or less	Attacker -1 step and abort
5-6	Attacker Abort
7-9	Defender Abort
10 or more	Defender -1 step and abort

Doubling Up

While air-air combat generally takes place on a unit by unit basis, "doubling up" may occur. Doubling up occurs when one side or the other has an advantage in numbers and can afford to engage two air units against one. The use of doubling is completely at the option of the player who has the capability—he may select to use it or not, and when.

To determine the availability of doubling up, total the number of full strength F type air units on each side. (Reduced units count as 1/2). Compare the total of each side. If one side has at least 2 more such units than the other, it has a doubling up capability. If the capability exists, the number of doubled up combats allowed the player is equal to the difference previously determined. Determine doubling only at the beginning of an air to air combat—changes in force structure during the combat do not cause any re-evaluation.

Attacker's Version of Doubling. When selecting air units for a round of combat, the attacker announces the intention to use doubling. He selects two air units (full or reduced, two counters regardless of strength) instead of one. The attacker rolls two dice for each of his two air units (and modifies each individually as per the above). The attacking player then selects the attack (of the two) he wishes to use and ignores the other. The attacker applies the combat result only to the air unit whose dice roll was actually used. Combat results affect the defender normally.

Defender's Version of Doubling. When selecting air units for a round of combat, the defender announces the intention to use doubling. He selects two air units (full or reduced, two counters regardless of strength) instead of one. The attacker rolls two dice and modifies normally, except he subtracts both defending air unit values from the dice roll, instead of just one. An abort result affects both defending air units. A step loss and abort result would require one step loss from one of the defending air units (defender's selection of which air unit to take the loss) and then both units would abort.

Supply Air Drop Table

For each air unit load of supplies being dropped, roll one die.

<i>Die</i>	<i>Result</i>
1-4	Supplies successfully dropped.
5-6	Supplies destroyed.

Unit Air Drop Table

Roll for each unit attempting to drop.

<i>Die</i>	<i>Result</i>
1-4	Unit Lands successfully.
5	Roll one die for direction (pick a direction to be equal to one, count clockwise), and another for distance. Place unit in the resulting hex.
6 or more	Unit destroyed.

+1 to die if landing hex terrain is other than open.

Units always land on their Combat Mode Side, and in DG mode.

If a unit lands atop an enemy combat unit, the dropping unit is destroyed.

Dump, Truck and Wagon Capture Table¹

Roll whenever enemy units enter the hex and no friendly units are also in the hex.

<i>Die</i>	<i>Dump (on Ground)²</i>	<i>Trucks (and supplies thereon)³</i>	<i>Wagons (and supplies thereon)⁴</i>
1	0	0	0
2	25	0	0
3	25	25	25
4	50	25	50
5	50	50	75
6	75	75	75

Notes:

1. Roll for each category separately. % is captured or destroyed. Half of the % is captured (round normally), the remainder is destroyed.
2. Remainder (that not captured or destroyed) may displace up to 5 hexes.
3. Remainder may displace up to 10 hexes.
4. Remainder may displace up to 5 hexes.
5. Captured portion includes the vehicles the dump might be on. These are converted into friendly counters and may move just after capture.

Dump Blowing Table

<i>Die</i>	<i>% Destroyed</i>
1	25
2-3	50
4-5	75
6	100

Combat Sequence Summary

1. The attacker identifies defending hex and attacking ground units.
2. The attacker announces whether it is an At All Costs attack.
3. Both players expend required supply points. See Combat and Barrage Supply Tables.
4. The attacker identifies his Action Rating unit, followed by the defender identifying his.
5. Determine the odds and make required odds shifts.
6. If optional surprise rule is being used, roll two dice to determine surprise.
If there is surprise, roll one die to determine the shift required.
Modify the odds column as needed.
7. Determine final DRM.
8. Roll two dice, Apply the final DRM, determine result.
10. Execute results.

At all costs attack: Pay double normal supply. Roll dice twice. On second roll additional modifier of -4 is used. All attacker options must be taken as losses.

Combat and Barrage Supply Tables

Combat Supply (either side):

Attacker: 2T (unless 1 RE or less engaged on side, then 1T)

Defender: 1T (unless 1 RE or less engaged on side, then 0)

If required to expend supply and it is not available, defenders are x1/2 for lack of combat supply.

Attackers which do not have their full combat supply available may not attack.

At All Costs attacks cost twice the normal SP cost.

Barrage Supply:

1T per RE of artillery in a Barrage attack.

Units which cannot expend a token cannot fire.

Only count artillery units in a barrage attack, never aircraft or ships.

Standard Action Rating Die Roll Modifier:

Action Rating of selected Attacking Unit — Action Rating of selected Defending Unit = DRM

Supply Level Effects Chart

Full: All values Normal

Low: All Attack or Barrage values x 1/2, other values are normal.

No: May not attack or Barrage, all other values x 1/2, roll on Attrition Table each week.

Air Bases which are at No Supply cannot refit air units:

Note: *Armor* and *Mech* units may not move if in No Supply.

These units are destroyed if forced to retreat via a combat result.

Optional Surprise Modifier: Roll two dice, add Action Rating differential for the combat.

Overrun Attack:

...if 11 or more, Attacker Surprise

...if 3 or less, Defender Surprise

Regular Attack:

...if 12 or more, Attacker Surprise

...if 2 or less, Defender Surprise

Modifier: -1 to the dice roll if the defender is in a hedgehog (any level) and/or fortification hex.
If a player has surprise, roll one die and shift that many columns in that player's favor.

COMBAT TABLE

(Two Dice)

Very Close	1:2	1:1	2:1	3:1	4:1	6:1	9:1	12:1	15:1	18:1	21:1	24:1	27:1
Close	1:3	1:2	1:1	2:1	3:1	4:1	6:1	9:1	11:1	14:1	16:1	18:1	21:1
Open	1:4	1:3	1:2	1:1	2:1	3:1	4:1	5:1	7:1	9:1	11:1	13:1	15:1

0	AL2	AL2	AL2	AL2	AL2	AL2	AL2	AL1o1	AL1o1 Do1	AL1o1 Do1	AL1 Do1	AL1 Do1	AL1 DL1o1	0
1	AL2	AL2	AL2	AL2	AL2	AL2	AL1o1	AL1o1 Do1	AL1o1 Do1	AL1 Do1	AL1 Do1	Ao1 DL1o1	Ao1 DL1o1	1
2	AL2	AL2	AL2	AL2	AL2	AL1o1	AL1o1 Do1	AL1o1 Do1	AL1 Do1	AL1 Do1	Ao1 DL1o1	Ao1 DL1o1	Ao1 DL1o1	2
3	AL2	AL2	AL2	AL2	AL1o1	AL1o1 Do1	AL1o1 Do1	AL1 Do1	AL1 Do1	Ao1 Do1	Ao1 DL1o1	Ao1 DL1o1	Ao1 e4 DL1o2	3
4	AL2	AL2	AL2	AL1o1	AL1o1 Do1	AL1o1 Do1	AL1 Do1	AL1 Do1	Ao1 Do1	Ao1 DL1o1	Ao1 DL1o1	Ao1 e4 DL1o2	Ae4 DL1o2	4
5	AL2	AL2	AL1o1	AL1o1 Do1	AL1o1 Do1	AL1 Do1	AL1 Do1	Ao1 Do1	Ao1 DL1o1	Ao1 DL1o1	Ao1 DL1o1	Ae4 DL1o2	Ae4 DL1o2	5
6	AL1o1	AL1o1 Do1	AL1o1 Do1	AL1o1 Do1	AL1o1 Do1	AL1 Do1	Ao1 Do1	Ao1 DL1o1	Ao1 DL1o1	Ao1 DL1o1	Ao1 e4 DL1o2	Ae4 DL1o2	Ae3 DL2o2DG	6
7	AL1o1	AL1o1 Do1	AL1o1 Do1	AL1o1 Do1	AL1 Do1	Ao1 Do1	Ao1 DL1o1	Ao1 DL1o1	Ao1 DL1o1	Ao1 e4 DL1o2	Ae4 DL1o2	Ae4 DL1o2	Ae3 DL2o2DG	7
8	AL1o1 Do1	AL1o1 Do1	AL1o1 Do1	AL1 Do1	Ao1 Do1	Ao1 Do1	Ao1 DL1o1	Ao1 DL1o1	Ao1 e4 DL1o2	Ae4 DL1o2	Ae4 DL1o2	Ae3 DL2o2DG	Ae3 DL2o2DG	8
9	AL1o1 Do1	AL1o1 Do1	AL1 Do1	Ao1 Do1	Ao1 Do1	Ao1 DL1o1	Ao1 DL1o1	Ao1 e4 DL1o2	Ae4 DL1o2	Ae4 DL1o2	Ae3 DL2o2DG	Ae3 DL2o2DG	Ae2 DL2o3DG	9
10	AL1o1 Do1	AL1 Do1	Ao1 Do1	Ao1 Do1	Ao1 DL1o1	Ao1 DL1o1	Ao1 DL1o1	Ae4 DL1o2	Ae4 DL1o2	Ae3 DL2o2DG	Ae3 DL2o2DG	Ae3 DL2o2DG	Ae2 DL2o3DG	10
11	AL1o1 Do1	Ao1 Do1	Ao1 Do1	Ao1 DL1o1	Ao1 DL1o1	Ao1 DL1o1	Ao1 e4 DL1o2	Ae4 DL1o2	Ae3 DL2o2DG	Ae3 DL2o2DG	Ae3 DL2o2DG	Ae2 DL2o3DG	Ae2 DL2o3DG	11
12	Ao1 Do1	Ao1 Do1	Ao1 DL1o1	Ao1 DL1o1	Ao1 DL1o1	Ao1 e4 DL1o2	Ae4 DL1o2	Ae3 DL2o2DG	Ae3 DL2o2DG	Ae3 DL2o2DG	Ae2 DL2o3DG	Ae2 DL2o3DG	Ae2 DL2o3DG	12
13	Ao1 Do1	Ao1 DL1o1	Ao1 DL1o1	Ao1 e4 DL1o2	Ao1 e4 DL1o2	Ae4 DL1o2	Ae3 DL2o2DG	Ae3 DL2o2DG	Ae3 DL2o2DG	Ae2 DL2o3DG	Ae2 DL2o3DG	Ae2 DL2o3DG	Ae2 DL2o3DG	13
14	Ao1 DL1o1	Ao1 DL1o1	Ao1 e4 DL1o2	Ae4 DL1o2	Ae4 DL1o2	Ae3 DL2o2DG	Ae3 DL2o2DG	Ae2 DL2o3DG	Ae2 DL2o3DG	Ae2 DL2o3DG	Ae2 DL2o3DG	Ae2 DL2o3DG	Ae2 DL2o3DG	14

Explanation of Results:

A:Attacker, D:Defender

L#: Loss Number, lose # steps. o#: Option Number, retreat or step loss option, total is #. DG: Defender is disorganized.

e#: Attackers with action ratings of # or more are exploitation marked. (This is never applied in Overruns)

1) If the attacker takes his option as a retreat the defender ignores any options he might have and any exploitation result is void.

2) If either side is destroyed before taking its option, the other side is exempt from its options.

3) Any unit which retreats 2 or more hexes is automatically marked DG.

Combat and Barrage Supply Tables

Combat Supply (either side):

Attacker: 2T (unless 1 RE or less engaged on side, then 1T)

Defender: 1T (unless 1 RE or less engaged on side, then 0)

If required to expend supply and it is not available, defenders are x1/2 for lack of combat supply.

Attackers which do not have their full combat supply available may not attack.

At All Costs attacks cost twice the normal SP cost.

Barrage Supply:

1T per RE of artillery in a Barrage attack.

Units which cannot expend a token cannot fire.

Only count artillery units in a barrage attack, never aircraft or ships.

Supply Level Effects Chart

Full: All values Normal

Low: All Attack or Barrage values x 1/2, other values are normal.

No: May not attack or Barrage, all other values x 1/2, roll on Attrition Table each week.

Air Bases which are at No Supply cannot refit air units.

Note: *Armor* and *Mech* units may not move if in No Supply.

These units are destroyed if forced to retreat via a combat result.

Flak Table

Total Flak Strength in Hex					
Two Dice	2 or less	3-6	7-12	13+	Dice
2-7	-	-	-	-	2-7
8	-	-	-	A	8
9	-	-	A	A	9
10	-	A	A	A	10
11	A	A	A	-1	11
12	A	-1	-1	-1	12

Each step has a flak rating of one. A four RE unit (four steps) would equal 4. Any hex containing trucks, wagons, or supplies (in any combination or amount) adds one to its flak rating. Air bases add a flak rating equal to their level (*actual* level, not the *usable* level.) Also, any friendly port or city hex always adds a flak rating of one to the hex.

-: No Effect

A: Abort

-1: Reduce the Air Unit and it Aborts

GS & Barrage vs Dump/Truck Table

Total Barrage & GS Strength									
Die	1	2-4	5-8	9-12	13-24	25-48	49-62	63+	
1	-	-	-	-	5%	5%	10%	10%	1
2	-	-	-	5%	5%	10%	10%	15%	2
3	-	-	5%	5%	10%	10%	15%	20%	3
4	-	5%	5%	10%	10%	15%	20%	25%	4
5	5%	5%	10%	10%	15%	20%	25%	30%	5
6	5%	10%	10%	15%	20%	25%	30%	30%	6

Result is applied to each target type separately. For example, a 25% result against a hex with 10 trucks, 4 wagons, and 15 Supply Points would generate a loss of 3 trucks, 1 wagon, and 4 SPs.

Apply each *line* a maximum of once in a given barrage if one or more of its reasons apply. Use all lines which apply.

"Points" in hex is the **Total** of all Truck, Wagon, and Supply Points in hex.

1. Shift 1 column left if in a **Hedgehog** (any level) or map printed **Fortification Hex**.
2. Shift 2 columns left if in a **Close** or **Very Close** Terrain Hex
3. If at least 5, but less than 15 "Points" in hex, shift 1 column right.
4. If more than 15 "Points" in hex, shift 2 columns right.

Barrage Table

		Total Barrage & GS Strength										
Two Dice	1 or less	2	3-4	5-7	8-11	12-16	17-24	25-40	41-68	69-116	117+	
2-3	-	-	-	-	-	-	-	-	-	-	DG	2-3
4	-	-	-	-	-	-	-	-	-	DG	1	4
5	-	-	-	-	-	-	-	-	DG	1	1	5
6	-	-	-	-	-	-	-	DG	1/2	1	1	6
7	-	-	-	-	-	-	DG	1	1	1	1	7
8	-	-	-	-	DG	DG	1/2	1	1	1	2	8
9	-	-	-	DG	1/2	1/2	1	1	1	2	2	9
10	-	-	DG	1/2	1/2	1	1	1	2	2	2	10
11	-	DG	1/2	1/2	1	1	1	2	2	2	3	11
12	DG	1/2	1/2	1	1	1	2	2	2	3	3	12

Roll once for hex. Owner's choice of unit(s) which take the step loss.

Results:

-: No Effect

#: Lose # steps and become disorganized.

1/2: Roll one die, on a 4-6 lose one step and become disorganized, otherwise, become disorganized, only.

DG: Target is disorganized.

Note: HQs may never be destroyed by barrage attacks.

Apply each line a maximum of once in a given barrage if one or more of its reasons apply. Use all lines which do apply.

1. Shift 1 column left if in level 1 or 2 Hedgehog.
2. Shift 2 columns left if in level 3 or 4 Hedgehog, or map printed fortification.
3. Shift 1 column left if in a Close or Very Close Terrain Hex
4. Shift 1 column left if no friendly unit adjacent to target hex. (Note that this affects both arty and air attacks.)
5. If less than 1 RE in hex, shift 2 columns left.
6. If only 1 RE in hex, shift 1 column left.
7. If at least 3, but less than 4 REs in hex, shift 1 column right.
8. If at least 4, but less than 6 REs in hex, shift 2 columns right.
9. If 6 or more REs in hex, shift 3 columns right.

GS & Barrage vs Facility Table

		Total Barrage & GS Strength					
Die	1-4	5-10	11-20	21-40	41-80	81+	
1	-	-	-	-	(AB)	1	1
2	-	-	-	(AB)	1	1	2
3	-	-	(AB)	1	1	1	3
4	-	(AB)	1	1	1	2	4
5	(AB)	1	1	2	2	2	5
6	1	1	1	2	2	2	6

-: No Effect

(AB): No effect except the attacking player may attack inactive air units at an airbase.

1: Railroad Damaged, Air Base or hedgehog reduced by one level

2: Railroad Damaged, Air Base or hedgehog reduced by two levels

#: Increase in Hits applied to a port.

Hits on port →	0	1	2	3	4
% of Capacity →	100	80	60	40	20

Inactive Air Unit Reduction Table

Given that an air base with inactive air units has been attacked using the GS & Barrage vs. Facility Table and a result of AB or better was obtained, roll one die for each inactive air unit at the base.

Die	Result
1-3	No Effect
4-6	Reduce Air Unit (Destroy if already reduced.)

Supply Tables

Total DSEs¹ drawing from a single source

Full

Same as DSE total

Low

1/2 number of SPs needed for full supply

¹Be sure to add 1 DSE for non-divisional units (regardless of the number of units involved) and to count armor, mech and fully-motorized divisions as 2 DSEs, all others as 1 DSE.

Supply Requirements for Special Units and Purposes

- Truck and Wagon Units: None
- HQ Units: Counted in with non-divisional units (in effect, not counted.)
- Aircraft Units: Units never expend supply themselves, they are supplied because their base is supplied.
- Air Bases: Pay 1 SP per desired usable level of each airbase. Therefore, a level 3 base that has 1 SP paid for it would function as a level 1 base for that game turn. Mark bases with step loss markers to show the current functional level of the base. This is done in the Supply Usage Phase.
- Build/Improve An Air Base One Level: 1 SP. One level per week max. Must have engineer capable unit present to do so.
- Rail Repair: 1T per hex.
- Hedgehogs: Build/improve one level: 2T. One level per week max (*two* if engineer capable unit in hex, 1 SP total supply cost.)

Attrition Table

Roll once per unit per Supply Usage Phase for each unit determined to be in "no supply."

One Die	First Time	Subsequent Times
2 or less	-	-
3 or 4	-	-1
5 or 6	-1	-1
7	-1	-2
8 or more	-2	-2

-: No Effect

#: Lose # steps.

Die Roll Modifiers:

- 3 if unit's Action Rating is 4 or 5
- 1 if unit's Action Rating is 3
- +1 if unit's Action Rating is 1
- +3 if unit's Action Rating is 0
- 1 if unit is 1/2 RE or less
- +1 if unit has more than 2 REs but less than 4 REs
- +2 if unit has 4 or more REs

Transportation

- 1 RE of non-Mech or non-Armor units counts the same as 1 Supply point when being transported by train, ship, or air. (Anything requiring Eq Repls to build or rebuild cannot be transported by air.)
- 1 RE of mech or armor counts as 2 SPs and may only be transported by train or ship.
- Rail transport done exclusively on multi-track lines costs 1/2 of normal rail cap cost for the load involved.
- Rail transport done where even one hex is along low-capacity lines costs double the normal rail cap cost for the load involved.