Tactical Operations: Advanced Rules

(Version 7.0)

The following is a compiled rules errata for the fourth/first printing (see below) of *Tactical Operations: Advanced Rules* as of 23 September, 2023.

FULL ERRATA

There have been seven printings of *Tactical Operations: Advanced Rules* to date. The first three printings of this material were found in the single-volume book *Tactical Operations*, which also included the material that would later be found in *Tactical Operations: Advanced Units & Equipment*. The dates for these single-volume printings were 2008, 2012, 2016 (the last one being a PDF-only release, but badged as and considered to be the third printing). *Tactical Operations* was then split into two volumes, but each of the two split volumes is considered to be a direct descendant of the single-volume version and so continues the printing numbers from there: 2020 (fourth printing / first two-volume printing), 2021, 2022, and 2023—you can check page 7 (single-volume) or page 4 (two-volume) of the book to see which printing you have.

Entries corrected in a given printing are marked with a number corresponding to that printing (e.g. entries corrected in the 5th printing are marked with a ⑤). There were no changes made from the third printing (last single-volume) to the fourth (first two-volume) printing except for a few fixes to the Castles Brian example, formatting cleanups, and page number reference corrections for the changeover from single-volume to two volumes.

This section combines all previous errata for the two-volume version with the new additions of version 7.0, so that every ruling is in order and in one place. Entries new to v7.0 are marked with a ⑦ and can also be found in the *New Additions* section at the end of this document. All errata and page number references here are for the fourth/first printing (2020) unless specified otherwise. Please note that, in the interests of brevity, typo and minor formatting corrections have not been listed unless they affect an understanding of the rules. In particular, the fifth/second printing fixed *a lot* of page number references.

⑤ **Sprinting (Movement Mode) (p. 16)**
At the end of the section insert the following new paragraph:

When Sprinting in lower gravity (see p. 53), the maximum safe speed remains twice Walking speed.

⑥ **Hull Down Vehicles (p. 19)**
Seventh paragraph, at the end of the paragraph insert the following:

Weapons prevented from firing due to the above may still be used with indirect fire, if capable of it, using all normal rules.

⑦ **Expanded Movement Costs and Planetary Conditions Tables (p. 30)**
Under "Ultra Rubble", change Prohibited Units to Vehicles, Rail, Naval Vessels

⑦ **Expanded Movement Costs and Planetary Conditions Tables (Cont.) (p. 34)**
Under "Gusting Rain", change To-Hit Modifier to +1/+2 DB/+3 Mi

⑥ **High/Low Gravity (p. 53)**
   1) *Replace the "ProtoMechs" paragraph with the following:*

   Infantry and ProtoMechs: MP for these unit types is not increased for low gravity, though it is reduced for high gravity. Damage rolls are not triggered by jumping in low gravity.

   2) *Under Weapon Attacks*

   Add a +1 to-hit modifier to all Missile and Direct-Fire Ballistic weapon attacks for every .2 G (or fraction thereof) above or below the Terran standard 1 G.
   <u>Change to:</u>
   Add a +1 to-hit modifier to all Missile and Direct-Fire Ballistic weapon attacks for every full .2 G above or below the Terran standard 1 G.

⑥ **Atmospheric Density (Pressure) (p. 52)**
Under "Hull Integrity", "'Mechs", at the end of the bullet point insert the following:

For other hits, treat all of a 'Mech's components in a breached location as non-functional: none of that location's actuators, weapons or other equipment works. If the breached location contains engine slots, the engine now functions as if it took as many critical hits as there were engine critical slots in that location.

⑥ **Tainted and Toxic Atmospheres (p. 54)**
At the end of the second paragraph insert the following:

Hull breaches in tainted and toxic atmospheres occur in the same manner as under *Vacuum* (see the *Hull Integrity* subsection, p. 52). However, on 'Mechs and aerospace units, only cockpit breaches have any effect.

⑥ **Full Moon Night/Glare (p. 56)**
At the end of the "Searchlights" section insert the following:

A unit with a searchlight ignores the movement penalty this condition imposes.

⑥ **Moonless Night/Solar Flare (p. 56)**
At the end of the "Searchlights" section insert the following:

A unit with a searchlight ignores the movement penalty this condition imposes.

⑦ **Bog Down Rules (p. 60)**
After "Falling", insert the following paragraph:

> **Kicks:** A 'Mech that is bogged down cannot make kick attacks.

⑦ **Terrain Factor and Conversion Table (p. 62)**
Under the "New Terrain" column, fifth entry down, change Jungle to Light Jungle.

⑦ **Terrain Factor Rules (p. 63)**
Before the "Movement Damage" subsection insert the following new subsection:

> **Fire Damage**
> Fire (see p. 41) reduces the Terrain Factor of all terrain elements in a hex by 5 points per turn. This is rather fast, but allows for meaningful effects within a playable amount of time. As a more realistic option, 2 points per turn may be used instead, which is the same rate buildings use. This damage is applied in the End Phase.
> The final result of a fire, after all Terrain Factor in the hex has been eliminated, is always a Rough hex (with the exception of ultra-heavy woods and jungle, which become ultra rough). As an alteration to the standard Fire rules, once this occurs the fire goes out in the same End Phase that the final fire damage was dealt.

⑦ **Glancing Blow (p. 78)**
Replace the fourth paragraph with the following:

> The *Glancing Blow* rule does not apply to: area effect (AE) damage, damage that does not require a to-hit roll (e.g. falling damage), non-damaging attacks (e.g. TAG), or all-or-nothing attacks (e.g. Streak missile launchers). If using the *Linking Weapons* rule (see p. 83), the entire linked group is considered a glancing blow.

⑦ **Opportunity Fire: Firing on the Move (p. 84)**
At the end of the fourth paragraph insert the following:

A jumping attack uses whatever facing the attacker desires. The jumping unit can be at any level, so long as it is not less than the height of the hex to be landed in and no higher than the unit's maximum Jumping MP in levels.

Autocannons (p. 98)
   1)   ⑦ *Under "Optional Firing Modes", "Rapid-Fire Mode", first paragraph, first sentence*

   Any standard or light autocannon (not LB-X, Ultra or Rotary models) can fire any ammunition type legal to it at double the standard rate,

Change to:
Any standard, light, or ProtoMech autocannon (not LB-X, Ultra or Rotary models) can fire any ammunition type legal to it at double the standard rate,

2) ⑤ *Under "Optional Firing Modes", "Multiple Targets", second paragraph, first sentence*

No matter what type of autocannon is being used, both targets must be in adjacent hexes and within range of the weapon.
Change to:
Both targets can be in the same hex, or in adjacent hexes but at the same level / elevation as one another. Both targets must be within range of the weapon.

⑤ Machine Guns (p. 100)
Under "Rapid-Fire Mode", third paragraph, second and third sentences

Conventional infantry may not use Rapid Fire mode. Battle Armor may use this rule, and roll for each active trooper firing an MG separately.
Change to:
Infantry of any kind may not use Rapid Fire mode.

⑥ Missiles (p. 101)
1) *Fifth paragraph, first sentence*

Because hot-loaded missiles are fully armed in the launcher, any critical hit to the launcher triggers a missile explosion that destroys all of the launcher's critical slots.
Change to:
Any critical hit to a launcher compatible with carried hot-loaded missiles triggers an ammunition explosion that destroys all of the launcher's critical slots.

2) *After the fifth sentence insert the following sentence:*

A launcher is no longer explosive once no hot-loaded missiles remain on the unit.

⑦ Environmental Sealing (p. 134)
Second paragraph, first sentence

Whenever a sealed building suffers CF damage in excess of 10 points (per hit), a 2D6 roll must be made, modified as noted on the Sealed Building Breach Table below.
Change to:
Whenever a sealed building suffers CF damage of 10 or more points (per hit), a 2D6 roll must be made, modified as noted on the Sealed Building Breach Table below.

⑦ Airborne Targeting (p. 148)
Second paragraph, first sentence

If using Low-Altitude Movement, apply the following additional modifiers: if the attack is made from Altitudes 4-6, apply a +1 modifier; if the attack is made from Altitudes 5-9, apply a +2 modifier;
Change to:
If using Low-Altitude Movement, apply the following additional modifiers: if the attack is made from Altitudes 4-6, apply a +1 modifier; if the attack is made from Altitudes 7-9, apply a +2 modifier;

⑦ Airborne Targeting (p. 149)
Replace the fourth paragraph (second full paragraph on the page) with the following:

If using the *Aerospace Units on Ground Mapsheets* rules, while a fighter is moving on ground mapsheets the target hex can be anywhere on the playing area within a weapon's firing arc, except for the hex directly underneath the airborne unit.

⑥ **Artillery Ordnance Table (p. 152)**
1) Delete the "Arrow IV Non-Homing Missile*" row
2) Under "High-Explosive (standard)", "Arrow IV" column, change — to 20/10 (R1)

⑦ **Direct Fire (p. 153)**
Third paragraph, last sentence

If the round misses its target, it scatters as described in *Targeting* (see p. 148), but only 1D6 is rolled to determine distance; i.e. the MoF is not applied.
<u>Change to:</u>
If the round misses its target, it scatters as described in *Targeting* (see p. 148), but the scatter distance is equal to the MoF / 2 (round up).

⑥ **Flak (p. 153)**
1) *Replace the second paragraph with the following:*

Apply a +3 to-hit modifier. Ignore the regular modifier for making a direct-fire attack; the only other modifiers applied are for using Type "F" weapons, the firing unit's movement and current damage, as well as woods/jungle, if any are intervening. Additionally, if firing at an airborne aerospace unit on the same Low-Altitude Map hex that is at Altitude 8 or lower, apply a +1 modifier for each 3 altitudes above the first 3; i.e. 1-3 altitudes provide no modifier, 4-6 altitudes provide a +1 modifier, 7-8 altitudes provide a +2 modifier. Flak shots from artillery cannot be made into any hex row beyond Ground on the High-Altitude Map.

2) *Replace the Low-Altitude and High-Altitude Maps paragraphs with the following:*

Low-Altitude and High-Altitude Maps: Damage against units on Low-Altitude and High-Altitude map hexes is determined normally, but no damage is applied to any adjacent hexes and/or altitudes. If multiple units exist within the same Low-Altitude or High-Altitude map hex, randomly determine which one received the damage. This can result in friendly fire.
When determining scatter on a Low-Altitude or High-Altitude map, divide the distance scattered by 6 (round down) to determine the distance in hexes scattered. If the shot does not scatter into a new hex, the shot inflicts no damage. If it scatters into a new hex, then apply damage per the above rules to one unit in that new hex.

⑥ **Ejection and Abandoning Units (p. 165)**
Under "'Mechs", before "Destruction of Head Location" insert the following paragraphs:

Abandonment: A MechWarrior who wishes to abandon their 'Mech must announce this during the End Phase of any turn in which their 'Mech is prone. The 'Mech must be shutdown. During the End Phase of the subsequent turn, the MechWarrior will enter the same hex as the 'Mech, just as if they had successfully ejected; see above. An adjacent hex may be entered if stacking limits prevent the use of the hex the 'Mech is in.
If the MechWarrior cannot enter the hex their 'Mech is in, they cannot abandon their 'Mech.

⑤ **Marine Points Tables (p. 170)**
Replace the contents of the main table and subtable with the following:

Base Trooper Values	Point Values (each)
Elemental trooper or Manei Domini	2
Inner Sphere battle armor trooper	1
Marine	1
Non-Marine soldiers (MechWarriors/infantry/vehicle crew)	0.75
Non-combat unit crew/pilot	0.5
Other (civilians)	0.15
Any trooper, marine, or soldier in armor with a Damage Divisor of 2 or higher*	+0.5

*See *Infantry Armor*, page 129, *TO: AUE*

Battle Armor Modifiers (cumulative)	Point Values (per trooper)
Battle Armor Weight Class	
PA(L)	+1
Light/Medium	+2
Heavy	+3
Assault	+4
Each point of intact armor (not inc. trooper)	+0.5
Quad*	−2
Mounts one or more Burst-Fire Weapons**	+2
Mounts one or more flame-based weapons (plasma, flamer, Firedrake)	+1
Mounts Space Operations Adaptation*	+1
Mounts magnetic clamps*	+1
Mounts paired magnetic or vibro-claws	+3
Mounts paired other claws	+2
Mounts one or more heavy battle claws of any type	+0.5
Mounts one or more cutting torches	+0.5
Mounts one or more industrial drills	+0.5
Mounts one or more AP weapon mounts	+0.25

*Only applies in microgravity
**Any weapon as shown on the Burst-Fire Weapon Damage Vs. Conventional Infantry Table (see p. 217, *TW*)

ERRATA NOTE: The accompanying examples in TO:AR pages 171-173 were also updated, to match the new values in this table. These updates (which just change the values for explanation purposes, not any rules) are not recorded here.

⑥ **Minefield Density Table (p. 176)**
First footnote

All minefields apply their damage in 5-point Damage Value groupings.
<u>Change to:</u>
All minefields apply damage equivalent to their current density in 5-point Damage Value groupings.

⑤ **Morale Tables (p. 180)**
Replace the table with the following:

MORALE TABLES

Experience Level	BattleMechs Morale Target*	Combat Vehicles Morale Target†	Infantry Morale Target‡	Support Vehicles Morale Target§
Green	4	6	9	10
Regular	2	4	6	7
Veteran	—§§	2	4	5
Elite	—§§	—§§	2	2

*Includes ProtoMechs and aerospace fighters.
†Includes military conventional fighters, Small Craft, DropShips and WarShips.
‡Includes military Support Vehicles, JumpShips and Space Stations.
§Includes IndustrialMechs (unless piloted by a military MechWarrior, in which case treat as a Combat Vehicle) and all civilian aerospace units.
§§See *Infernos* and *Cruise Missile Attack* (see *Morale Checks*, p. 179).

Special Source Modifier (All)§§	Target Modifier
Inferno	+1/+3*
Cruise Missile	+2

*The modifier to the left of the slash is for all non-infantry units, the modifier to the right of the slash for infantry.

Attack Source Modifier (Infantry Only)	Target Modifier
BattleMech in LOS	+1
Artillery	+2
Flamer or Fire	+3
Elite	—§§

Other Modifiers Modifier (Infantry Only)	Target Modifier
Broken Morale	+1
Cumulative Modifiers	
Light or Medium Battle Armor Unit	−1
Heavy or Assault Battle Armor Unit	−2
Anti-'Mech Skill of 5 or less	−1
Conventional Infantry with Armor (see p. 129, *TO:AUE*)	−1
Unit in Building	−2
Unit Dug In	−2

�616 **Double-Blind Rules (p. 188)**
Under "Movement Phase (Spotting Phase)", at the end of the section insert the following paragraph:

Occupied Destination Hex: If a hex contains a unit that was not previously detected, and entering that hex would violate stacking rules, and the unit occupying the destination hex has already moved, then the unit conducting the move initiates an Unintentional Charge (p. 148, *TW*) or Accidental Fall From Above (p. 152, *TW*). If instead the unit occupying the destination hex has not yet moved, treat the unit that just attempted to enter the occupied hex as occupying the destination hex until the unit that originally occupied the hex has moved. At the end of the Movement Phase, if the hex is still occupied by the original unit, then the unit that entered the hex initiates an Unintentional Charge or Accidental Fall From Above. Note that this may require moving the unit back along its path of travel one hex until the physical attack is resolved. Otherwise, the unit that originally attempted to enter the occupied hex completes its movement normally.

Ⓢ **Visual Spotting (p. 189)**
Replace the "Airborne Units" paragraph with the following:

Airborne Units: Against other airborne units and when using Aerospace on ground maps, use the Visual Range Table as usual. When using low altitude maps and against ground units, an airborne unit is only able to visually detect units along its flight path and must be at or below Altitude 8.

�616 **Sensor Ranges Table (p. 190)**
First subtable, "Sensor System" column

After "'Mech Radar/Support Vehicle Basic Fire Control IR", add a † footnote marker

�616 **Infrared Sensors (p. 190)**
Replace the last paragraph with the following:

Any active unit in a scenario can be detected by IR, regardless of whether or not that unit has a Heat Scale, unless the scenario states the unit is activating only after the scenario begins (in which case IR can only spot it upon activation).

�616 **Magscan Sensors (p. 190)**
Replace the first paragraph with the following:

Any unit within range of magscan sensors (except conventional foot and jump infantry) can be spotted regardless of LOS (though buildings block magscans, per the Sensor Ranges Table).

�616 **Physical Weapon Attacks Addendum (p. 211)**
Under "To-Hit Modifier", change the Flail to 0 and the Mace to +1.

NEW ADDITIONS

These are all the major new entries or modifications of old entries made for the seventh printing of *Tactical Operations: Advanced Rules*. They may also be found in the **Full Errata** section in the appropriate locations, marked with a ⑦.

⑦ **Expanded Movement Costs and Planetary Conditions Tables (p. 30)**
Under "Ultra Rubble", change Prohibited Units to Vehicles, Rail, Naval Vessels

⑦ **Expanded Movement Costs and Planetary Conditions Tables (Cont.) (p. 34)**
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Under "Optional Firing Modes", "Rapid-Fire Mode", first paragraph, first sentence

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Change to:
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Second paragraph, first sentence

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Change to:
Whenever a sealed building suffers CF damage of 10 or more points (per hit), a 2D6 roll must be made, modified as noted on the Sealed Building Breach Table below.

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Second paragraph, first sentence

If using Low-Altitude Movement, apply the following additional modifiers: if the attack is made from Altitudes 4-6, apply a +1 modifier; if the attack is made from Altitudes 5-9, apply a +2 modifier;
Change to:
If using Low-Altitude Movement, apply the following additional modifiers: if the attack is made from Altitudes 4-6, apply a +1 modifier; if the attack is made from Altitudes 7-9, apply a +2 modifier;

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If using the *Aerospace Units on Ground Mapsheets* rules, while a fighter is moving on ground mapsheets the target hex can be anywhere on the playing area within a weapon's firing arc, except for the hex directly underneath the airborne unit.

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Third paragraph, last sentence

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If the round misses its target, it scatters as described in *Targeting* (see p. 148), but the scatter distance is equal to the MoF / 2 (round up).