Strategic Operations

(Version 2.1)

The following is a compiled rules errata for the first printing of *Strategic Operations* as of 6 June, 2016.

FULL ERRATA

This section combines all changes from previous errata releases with the new additions of version 2.1, so that every ruling is in order and in one place. There have been two releases of *Strategic Operations* to date: 2009 (first printing) and 2011 (second printing)—you can check p. 7 of the book to see which one you have. All errata and page number references errata here are for the first printing (2009). All entries not marked with a ① are included in the 2011 second printing.

Please note that, in the interests of brevity, typo and minor formatting corrections have generally not been listed unless they affect an understanding of the rules. In addition, all errata for Quick-Strike and BattleForce has been removed, as the first has been completely replaced by *Alpha Strike* and the second, while still supported, uses much of the same rules.

Introduction

Additional Record Sheets and Templates (p. 13)
Under **Radar Map**, change the word “junction” to “conjunction.”

Additional Record Sheets and Templates (p. 13)
Under **High Speed Closing Engagements Sheet**, change the word “junction” to “conjunction.”

General Rules

Abstract Ground Support (p. 19)
Under “Movement”, at the end of the first paragraph insert the following:

Players should pick a starting Altitude for units on the Radar map when they enter play. Units moving to the central zone to engage ground units can use an available zone movement point to raise or lower that Altitude by 1. For example, a light fighter that can move two zones in a turn can use one to move to the center zone and one to drop one Altitude.

Dropping Troops (p. 22)
Under **Atmospheric Drops**, change the first two lines of the first paragraph to begin “’Mechs, ProtoMechs, battle armor, WiGE Vehicles and vehicles with Jumping MP may make atmospheric drops. If a unit that can mount jump jets does not mount jump jets…”

Ejection and Abandoning Ship (p. 26)
Under **Initiative**

...always move last after all other aerospace units have moved, including drooping troops (see p. 22).
Change to:
...always move last after all other aerospace units have moved, including dropping troops (see p. 22)."

① **Recommended Fighter Squadron Formation Table (p. 28) (also p. 439)**
Add the following new entry: "Free Worlds League 6”

Maximum Damage Threshold example (p. 29)
In the first column, fourth paragraph, change the last line to

He decides to equip each fighter with a single Anti-Ship Missile (equal to 5 bomb slots) and 1 HE Bomb.

Maximum Damage Threshold example (p. 29)
In the second column, first paragraph, change the last line to

Finally, for Bombs: 1 AS Missile and 1 HE Bomb.

Maximum Damage Threshold [example text] (p. 29)
In the right column, change the second paragraph to:

Finally, Joel mentally notes that the Maximum Damage Threshold of each bay is equal to the Attack Value for each weapon bay. He then fills in the AV Each column with these values for ease of reference: 12 for the Nose LRM-15 w/Artemis bay, 10 for the Nose ER PPC bay, 8 for the Nose light Gauss rifle bay, 5 for the Wing ER medium laser bay, 6 for the Wing medium pulse laser bay, 3 for the Aft ER small laser bay, 30 for the AS Missiles and 10 for the HE Bombs.

Heat Sinks [example text] (p. 29)
Change the entire paragraph to:

Joel adds all the heat sinks of his six fighters to find the total value for his squadron and comes up with 84 heat sinks (11 doubles for each Shade, 18 doubles for each Rusalka and 13 doubles for each Striga). He writes that value down on the record sheet, in the Squadron Data section, as well as the fighter squadron's total heat capacity, which is 168, and then checks the double heat sinks box. If any of the fighters mounted single heat sinks, Joel would have needed to track the double and single heat sinks separately for purposes of damage and heat dissipation.

Fighter Squadron Record Sheet [example illustration] (p. 30)
Make the following changes:

- Under Squadron Data, HE Bombs' Starting #/Current # should be "6/6"
- Total Heat Capacity (Current) should be 84 (168)
- All fighter entries should have 1 HE Bomb each instead of 2
- The Shade entries should have Thrust ratings of 9 (7) Safe and 14 (11) Max
- The "Rusalkas" entries should read "Rusalka"
- The "Strigas" entries should read "Striga"
- The Rusalka entries should have Thrust ratings of 7 (5) Safe and 11 (8) Max
- The Striga entries should have Thrust ratings of 6 (4) Safe and 9 (6) Max

Fighter Squadron Attack [example text] (pp. 31-32)
Replace the entire example text with the following, with specific fixes noted in bold:

Joel is in the thick of a battle and his fighter squadron is targeting an enemy Achilles DropShip that has just entered the fray during Turn 3. He's already lost one fighter (the Shade in Slot 2) and so his squadron of six has become a squadron of five. He already launched all his external stores, so those are not available to him. ***Additionally, the Shade in Slot 1 has taken two armor hits, three heat sink hits and a Wing weapon critical hit, so the ER medium laser bay on that Fighter generates only 10 heat and 10 damage (as opposed to the standard 20 heat and 20 damage).***

The DropShip is at medium range and in the fighter squadron's front arc, and so Joel opens up with as many weapon bays as he can without overheating. ***With damage, the 84 starting double heat sinks are now 70 double heat sinks, giving him a total heat capacity of 140.*** *After playing with numbers quickly, Joel decides not to fire the ER PPC bay, and the medium pulse laser bay is out of range, leaving him with the LRM-15 w/Artemis, ER medium laser and light Gauss rifle bays, which will add up to 111 heat (remembering that the Shade in Slot 1 is only generating 10 heat for its ER medium laser bay);* ***this is inside the 140*** *maximum heat the fighter squadron can generate per turn.*

He makes an attack with all three weapon bays; he misses with the LRM 15 w/ Artemis, but both the other two bays strike the target! Looking at his fighter squadron sheet, Joel notes that the ERML Wing bay has 18 lasers still active. As such, Joel rolls 2D6 on the 18 column of the Cluster Hits Table, with a result of 9, meaning 14 of the 18 ER medium lasers strike the target. Adding the Attack Values for the fourteen ER medium lasers that did strike the target creates a final Attack Value of 70 (14 x 5 AV = 70). Joel then rolls for a hit location on the appropriate column of the Aerospace Units Hit Location Table and comes up with a result of 9: Left Side, which translates into a Left Wing for an Aerodyne

DropShip. The controlling player of the Achilles DropShip assigns 70 points of standard-scale damage as a single hit to that location, ***reducing the damaged armor from 250 down to 180****. The Damage Threshold of the armor in that location on the Achilles was 26; since the Maximum Damage Threshold of the ER Medium Laser bay is only 5, there is no potential for a critical hit due to exceeding that location's Damage Threshold.*

Joel then ***fires*** *the bay of 6 light Gauss rifles and so he rolls on the 6 column of the Cluster Hits Table. He gets a result of 5. He consults the 6 column of the Cluster Hits Table (number of active light Gauss rifles) and sees that only three rifles (one fighters worth) struck the target. Multiplying the AV Each value of 8 by 3 he gets a total Attack Value of 24. Joel rolls a 10 for hit location, resulting in 24 points of damage being assigned to the Left Wing again, reducing the armor from 180 to 156. Even though they are playing with Variable Damage Thresholds, the current Threshold of that location is 18, which is well below the MDT of 8 for a light Gauss rifle bay, and so there is no potential for a critical hit for damage exceeding that location's Damage Threshold.*

During Turn 4, Joel's fighter squadron remains in the same condition from last turn and once again he sets his sights on the Achilles DropShip. The DropShip is in the fighter squadron's front arc and this time the direction of attack is on the already damaged Left Side, but the range is long, meaning that the powerful ER medium laser bay is out of range. Joel fires the ER PPC bay this time, along with the LRM-15 w/Artemis and the light Gauss rifle bays. The total heat is 51, well within the squadron's ***140*** *heat capacity. The ER PPC bay fails to hit, but Joel strikes the DropShip with the LRM-15 w/Artemis and light Gauss rifle bays.*

Joel decides to determine the light Gauss rifle bay first; he already knows to roll 2D6 on the 6 column of the Cluster Hits Table. He gets a result of 11; all six rifles strike the target! He then rolls a 7 on the Hit Location Table, and the controlling player of the DropShip applies the 48 Attack Value of the six rifles (AV Each of 8 times 6 light Gauss rifles) as a single block against the Left Wing, ***taking its 156 armor down to 108****. As before, the 8 Maximum Damage Threshold of the light Gauss rifle bay means it cannot potentially cause a critical hit through exceeding the Damage Threshold of that location.*

Joel then looks at the squadron record sheet to determine that there are three active fighters with an LRM-15 w/Artemis bay (in slots 1, 3 and 4). He rolls 2D6 with a result of 7, and consults the 3 column of the Cluster Hits Table; two fighters struck the target. He then adds the Attack Value of the LRM-15 w/Artemis from the fighters in slots 1 and 3, providing a final Attack Value of 24. Joel rolls for location and gets a 6: the Left Wing again! ***The controlling player reduces that location's 108 armor to 84. This time, however, the current Damage Threshold of the DropShip's Left Wing at the time the LRM-15 w/Artemis bay's Attack Value is assigned is 12 [108 (current Armor Value) ÷ 10 = 11]. As 12 is the Maximum Damage Threshold of the LRM-15 w/Artemis bay, and that value exceeds the current Damage Threshold, Joel has a chance to cause a critical hit by exceeding the Damage Threshold of that location!***

Fighter Squadron is Attacked [example text] (p. 33)

1) *Right column, first paragraph*

   Shade in Slot 1 has taken 2 points of capital-scale damage in previous turns.
   Change to:
   Shade in Slot 1 has taken 8 points of capital-scale damage in previous turns.

2) *Right column, second paragraph*

   …AC/20/Gauss rifle bay and a 2 LRM-20 w/Artemis bay (another natural 12 to-hit roll result). Though it won't matter for damage purposes, all the attacks struck the fighter squadron's right side (important to know for any critical hits assigned).
   Change to:
   …AC/20/Gauss rifle bay, a 2 LRM-20 w/Artemis bay (another natural 12 to-hit roll result), and 2 medium pulse lasers. Though it won't matter for damage purposes, all the attacks struck the fighter squadron's right side.

3) *Right column, third paragraph*

   (the fighter was already down 2 armor squares).
   Change to:
   (the fighter was already down 8 armor squares).

4) *Right column, seventh paragraph*

For the AC/20/Gauss rifle bay (capital-scale Attack Value 4), the opponent rolls a 2. Because that fighter was previously destroyed, he rolls again with a result of 4; Joel marks off 4 damage points on the Rusalka in that location. Once again, because that was more than 2 points of armor, the opponent rolls a possible critical hit, but with a 6 result comes up short.
Change to:
For the AC/20/Gauss rifle bay (capital-scale Attack Value 4), the opponent rolls a 4. Joel marks off 4 damage points on the Rusalka in that location. Once again, because that was more than 2 points of armor, the opponent rolls a possible critical hit, but with a 6 result comes up short. The Medium Pulse bay also hits the Rusalka in slot 4 for one point."

Morale Ratings Table (p. 40)
Under "Other," the values for "Force has suffered desertions" and "Force has suffered mutineers" should be -1 and -3, respectively.

Actions (p. 47)
Replace the next-to-last sentence with the following:

Each player may give one action to each Unit (usually a company or Trinary, though players may, if they all agree, use lances and Stars instead) in his or her Force, and no Element ('Mech, vehicle, infantry platoon and so on) may be given more than one order in a Strategic Turn.

RANDOM AEROSPACE ASSIGNMENT TABLE: INNER SPHERE 1 (p. 51)
Under DropShips, House Kurita, change Nekohono`o (3057) to Nekohono`o (3067)
Under DropShips, House Marik, change Merlin (3057) to Merlin (3067)
Under DropShips, House Marik, change Merlin (3057) to Merlin (3067)

RANDOM AEROSPACE ASSIGNMENT TABLE: INNER SPHERE 2 (p. 52)
Under DropShips, ComStar, change Model 96 'Elephant' (3057) to Model 96 'Elephant' (3075)

① **Random 'Mech Assignment Table: Minor States 2 (p. 55)**
Under "Light Mechs", "Nova Cats", # 3 result

AF1A Arctic Fox [30] (3067)*
Change to:
AF1A Arctic Fox [30] (3060)*

RANDOM AEROSPACE ASSIGNMENT TABLE: MINOR STATES 1 (p. 56)
Under Light Aerospace Fighters, die roll 7 Marian Hegemony column, change S-27 Sabre to SB-27 Sabre

Advanced Aerospace Movement

Advanced Movement (p. 66)
After the section **Lateral and Deceleration Movement**, add a new section:

ANGLES OF ATTACK
When using these advanced movement rules, Angle of Attack to-hit modifiers (see, p. 237, *TW*) are calculated from the units' thrust vectors, not their relative facings.

① **Landing and Liftoff (Expanded) (p. 72)**
Before "Vertical Landing and Liftoff", insert the following new section:

FUEL USE FOR LANDING AND TAKEOFF

When launching from transport bays (per p. 86, *TW*), an aerospace fighter or small craft expends no fuel or thrust for the launch process, having been ejected from the carrier with a speed and heading equal to that of the carrier. As noted in Total Warfare, all of the launched vehicle's thrust is available for use on the turn of launch. This also applies to any large craft undocking maneuvers (see p. 66) and the use of flight decks on a support vehicle.

When recovering to transport bays (see p. 86, *TW*), an aerospace fighter or small craft expends no thrust or fuel points for the recovery process other than the thrust points required to match the heading and speed of the carrier (including any thrust points spent by the carrier during the 5 turns of the recovery process.) This also applies to any large craft docking maneuvers (see p. 66).

When landing on a ground map using a horizontal, rolling landing (see p. 87, *TW*), an aerospace fighter, conventional fighter, aerodyne small craft, or aerodyne DropShip expends no extra thrust or fuel points other than those required to reach the altitude and speed required for landing. This also applies to conventional fighters with VSTOL making a shortened landing run.

When landing on a ground map vertically, any vehicle expends 1 thrust point and fuel point per 0.5Gs of local gravity, rounded up (see p. *55, TO*). These thrust points are not available for other maneuvers in that turn. This also applies to vehicles landing on a flight deck of a support vehicle, which is generally performed at high thrust levels in case of a failed landing, and to aerodyne DropShips and small craft attempting to shorten their landing run (see p. 87, *TW*).

When taking off from a ground map using a horizontal, rolling liftoff (see p. 88, *TW*), an aerospace fighter, conventional fighter, aerodyne small craft, or aerodyne DropShip expends 1 thrust point and fuel point to put the vehicle on the appropriate hex of the atmospheric map moving at 1 hex per turn. The vehicle may not expend additional thrust that turn, representing the low-and-slow nature of aircraft at the moment of takeoff.

When taking off from a ground map using a vertical liftoff (see p. 88, *TW*), any vehicle expends 1 thrust point and fuel point per 0.5Gs of local gravity, rounded up, and is placed on the appropriate hex of the atmospheric map in a hover (0 hexes per turn). The vehicle may not expend additional thrust that turn, representing thrust being constrained to avoid damaging the vehicle with backblast from the ground during launch.

Hyperspace Travel (p. 86)
In the Proximity Point Distance Table and Distance to Zenith/Nadir Jump Point Table box, add the following line to the bottom of the box:

All distances given are in billions of kilometers.

Advanced Aerospace Combat

Advanced Point Defense (p. 97)
Right column, replace the second paragraph with the following:

> Only a PDW bay (2 or more weapons) can affect a capital missile; a single PDW has no effect. Once all the damage from a PDW bay has been determined, convert it to capital-scale damage and apply it to the missile to inflict the to-hit modifiers described above.

Ammunition (p. 98)
Under "Ammunition Explosions", change the end of the last sentence

roll 1D6 to determine the number of tons of ammunition involved
Change to:
roll 1D6 to determine the number of tons of ammunition involved (for weapons with ammunition weighing more than one ton per shot, round tonnage up to the nearest whole shot)."

Damaging ECM/ECCM (p. 112)
In the third paragraph, change "FCS" to "CIC."

ECM/ECCM [example text] (p. 112)
Eighth paragraph, first sentence

A straight +1 modifier is applied for Hex D because of ECM from the DropShip in Hex I).
Change to:
A straight +1 modifier is applied for Hex I because of ECM from the DropShip in Hex I.

ECM/ECCM [example text] (p. 113)
In the second paragraph (first full), change the first line to

Once again, as a Large Craft, the Aurora *ignores the enemy fighter in Hex F.*
Change to:
Once again, as a Large Craft, the Aurora ignores the enemy fighter in Hex H.

Large Craft and Sensor Shadows, (p. 114)
Immediately before the "Electronic Warfare" paragraph, add a new paragraph with the following text:

Sensor shadows are only applicable on the space map (or the space portion of a High-Altitude Map).

Capital Weapons Detailed Ranges Table (p. 115)
Change the Long Range Value for the Heavy NPPC from "27-36" to "27-39".

Over-Penetration Weapons Fire Table (p. 116)
6 - WarShips with an SI 30 or less and any JumpShips, Space Stations or DropShips apply over-penetration rules*
Change to:
6 - WarShips with an original SI 30 or less and any JumpShips, Space Stations or DropShips apply over-penetration rules*

Tele-operated Missiles (Expanded) (p. 117)
In between the "Targeting Capital Missiles" and "Variable Damage Thresholds" sections, insert the following new section:

TELE-OPERATED MISSILES (EXPANDED)

The following rule provides an additional option for tele-operated missiles. Unless specifically stated otherwise, all standard tele-operated rules are still in effect (see p. 251, *TW*).

A single launcher may fire and operate more than one active tele-operated missile at one time, though only a single tele-operated missile may be launched in a single turn.

At the start of any turn in which a player wishes to fire a tele-operated missile from a launcher already controlling an active tele-operated missile (or missiles), a capital bay or two standard bays must be declared "inactive" (the bay(s) can be located anywhere on the ship).

An inactive bay cannot be fired until it is activated again.

To determine when a bay can be activated again, use the following rules:

At the end of every turn, the player counts up the number of active (i.e. that have not been destroyed, used up their fuel, or left the playing area) tele-operated missiles being controlled beyond the first missile by a single launcher.

- If the number is equal to the number of inactive bays, nothing happens.
- If the number if less than the number of inactive bays, the player nominates the difference in bays he wishes to activate (either 1 capital bay or two standard bays); the "activated" bays can be fired and used normally starting on the following turn.

Point Defense Bays and Screen Launchers: Neither Point Defense Bays or Screen Launchers count towards bay totals and cannot be "subtracted" to allow for the firing of additional tele-operated missiles.

At the start of a turn, a Nekohono'o-class DropShip has 5 active tele-operate kraken missiles on the playing area, 3 operating from one launcher and 2 operating from another launcher. Since that's 3 missiles beyond the first being controlled by the same launchers, and the DropShip has no capital bays, Jacob previously made the MRM and SRM bays in the nose, and the MRM and PPC bays in the FL/FR arcs inactive (a total of 6 bays).

Jacob wants to fire three more tele-operated missiles this turn. Since one of those missiles is the first active missile controlled by the third launcher, there's no penalty. However, the other two launchers are already controlling multiple launchers, so he must nominate four more bays to make them inactive: he chooses the ER PPC bays in the FL/FR arcs, as well as the SRM bays in the AL/AR arcs, and fires during the turn, giving him 8 tele-operated missiles on the playing area.

At the end of the turn, however, 4 of the 8 missiles have either run out of fuel, left the playing area or been destroyed. He subtracts the number of active missiles beyond the first for each launcher resulting in 1 [4 (active tele-operated missiles beyond the first) – 3 (number of launchers). Jacob then compares that number with the number of inactive bays he has, which leaves him with a difference of 3 [4 (8 inactive standard bays / 2) – 1 [active tele-operated missiles beyond the first) = 3]. This means he may activate all but 2 of his bays; he leaves the MRM and SRM bays in the nose inactive.

Advanced Sensors (p. 118)

1) *Between the "Detection Check" and "Active Probes" subsections, insert the following new paragraph:*

An unmanned unit makes a Detection Check based upon the amount of Communications Equipment (or its equivalency) it mounts (see p. 212, *TM*). The Base Target Number starts at 7. For every two tons of Communications Equipment (or its equivalency), drop the number by 1 (round down). For example, an unmanned DropShip without any additional Communication Equipment has an equivalency of 3 tons, meaning the Detection Check is made with a Modified Target Number of 6 [7 (Base Target Number) –1 (3 tons of equivalent Communication Equipment / 2 = 1.5, rounded down to 1) = 6]. If it had mounted 3 tons of additional Communications Equipment, the Modified Target Number would 4 [7 (Base Target Number) –3 (6 tons of Communication Equipment and/or its equivalency / 2 = 3) = 6]. The modifiers for Active Probes and Naval Comm-Scanner Suites (see below) apply as is to unmanned Detection Checks.

2) ① *Under "Naval Comm-Scanner Suite", replace the entire entry with the following:*

Naval Comm-Scanner Suite: Double the sensor range for a Small NCSS and apply a –1 modifier to any Detection Check to detect a given unit; triple the sensor range for a Large NCSS and apply a –2 modifier to any Detection Check to detect a given unit (see p. 332, *TO*). NCSS does not affect sensor ranges for emergence wave detection. For other detection types, either modify the maximum listed range and/or modify the range used to calculate penalties as appropriate.

Zero-G Ground Unit Combat on Large Aerospace Units (p. 120)

Insert the following on page 120 between the headings "**BATTLEMECH**" and "**WEAPON ATTACKS**"

ZERO-G GROUND UNIT COMBAT ON LARGE AEROSPACE UNITS

Ground Units on a Large Aerospace Unit Hull may engage in combat using the "Ground Scenario" rules with the following modifications:

- All units are treated as ground units, using ground combat ranges.
- Only Biped units may move*
- Jump capable units have an MP of Jump -1
- Non-jump capable units have an MP of Walk/Cruise -2
- In any turn a unit moves it must make a Piloting Skill Roll. If it fails, it comes off the hull.
- If the Aerospace unit the ground units are on changes its heading or velocity, all units on the hull must make a Piloting Skill Roll.
- Any unit that fails a Piloting Skill Roll is removed from the playing field. It has lost its hold on the hull and floats away. It must make a new landing attempt.

Expanded rules for ground units on large aerospace hulls will be detailed in *Interstellar Operations*.

*An exception to this rule are tracked combat units operating on Large Aerospace units that have had their hull

modified to support tracked combat units operating on special tracks. This must be declared prior to the scenario start. When the mapsheets are laid out, the player controlling the aerospace craft may place 50 track hexes on each map sheet. Track hexes must all be connected. The tracked vehicles may only move on these track-designated hexes.

AeroSpace Technologies

① **Quick Charging (p. 125)**
Example: a habitable planet for a yellow is about ten times closer to the star than the jump points.
Change to:
Example: a habitable planet for a yellow sun is about ten times closer to the star than the jump points.

JumpShip Gymnastics (p. 131)
Change the last sentence of the third paragraph to read, “There's a brief period for the drive controller to accept certain feedback, like recognizing a gravity-distorted field via the Brandt Recoil effect or damage in the core from quick-charging."

Fuel (p. 140)
In the last line of this page, change "atomic mass 2" to "molecular mass 2".

Advanced Aerospace Construction

Determine Fuel Capacity (p. 147)
In the last sentence of the first paragraph, change “(rounded up to the nearest half-ton)” to “(rounded up to the nearest ton)”.

Add Control/Crew Systems (p. 149)
In the second line in the **Crew** paragraph, replace the page reference to “(see p. 150).”

Additional Crew table (p. 150)
Change page reference for Mobile Field Base entry to “(per item, see p. 330, *TO*)”.

Step 4 – Add Armor (p. 152)
Second column, first paragraph

Structural Integrity weight
Change to:
Structural Integrity value

Step 4 – Add Armor (p. 152)
Advanced Aerospace Unit Armor Table, Space Stations

Structural Integrity Mass ÷ 3
Change to:
Structural Integrity Mass ÷ 3 + 60

Step 4 – Add Armor examples (p. 153)
In the example text for the Alliance space station, change the latter part of the first sentence to read

Joel finds that the maximum armor he can install on the unit is 393 tons (1,000 tons of Structural Integrity ÷ 3 + 60 = 393.33, rounded down to 393).

Step 4 – Add Armor examples (p. 153)
In the example text for the *McKenna*, it should allocate 132 points to its Aft facing.

Advanced Aerospace Unit Weapon Bays and Firing Arcs (p. 154)
Add "MML" to the list of weapon bay classes.

Step 5: Add Weapons, Ammunition and Other Equipment (p. 155)

1) ① *Under "Crew Quarters", first paragraph, third sentence*

   Alternative quarters, may be installed to save on weight, reflecting a more spartan arrangement, such as applying steerage-quality quarters to all crew and passengers, or even allocating crew quarters in the form of a dedicated infantry bay, where the crew sleeps in cramped bunks with no private space whatsoever.
   Change to:
   Alternative quarters, may be installed to save on weight, reflecting a more spartan arrangement, such as applying steerage-quality quarters to all crew and passengers.

2) *Under "Transport Bays and Doors", eleventh and twelfth lines in the second paragraph, delete the following:*

   (in which case, 1 ton of food and water covered the needs of 200 people for 1 day)

Step 5: Add Weapons, Ammunition, and Other Equipment (p. 155)
Under "Transport Bays and Doors", third paragraph, last sentence

Personnel transported in cargo bays use 1 ton of consumables per 10 people per day.
Change to:
Personnel transported in cargo bays use 1 ton of consumables per 5 people per day.

Maintenance, Repair, Supply, and Customization

Maintenance, Repair, and Salvage Check Modifiers Table (Continued) (p. 171)
In the double-asterisk (**) footnote under the Location table, change the page reference for the Mobile Field Base to "(see p. 330, *TO*)."

Fuel Availability & Cost Table (p. 179)
Add a dagger (†) to the "Cost (per ton)" column head. At the end of the table, add a second footnote, reading

† The values above are for delivery to forward military bases. Outside of battle zones, these prices can vary from 0.5 to 2× the listed values, and hydrogen may be as inexpensive as 500 C-bills/ton.

Obtaining Replacement Personnel (Optional) (p. 181)
First paragraph, last sentence

use the values provided by the Support Personnel Experience Table (see p. 187)
Change to:
use the values provided by the Support Personnel Experience Table (see p. 168)

Replacement example (p. 182)
Ninth and tenth lines

(30 minutes per armor point in this case)
Change to:
(10 minutes per armor point in this case)

Special Rules (p. 182)
Under "Extra Time", in the second paragraph, change the beginning of the second sentence to read

The repair time may instead be tripled or quadrupled (each additional time increase provides a cumulative –1 modifier; maximum –3),

Master Repair Table (p. 183)
Insert the following entry in the Vehicles section, under "CASE/CASE II":

"Engine … 0 … -- … 360"

FrankenMechs (Optional) (p. 189)
In the "Engine" section, add the following paragraph after the first:

> The engine does not have to come from the 'Mech torso parts being used on the FrankenMech, and there are no restrictions on its type and rating (other than the standard engine restrictions for Industrialmechs or Battlemechs) as long as it grants at least one Walking MP to the final 'Mech.

Salvage (p. 191)
Fourth paragraph, first sentence

and the Salvage Modifiers Table (see p. 192)
Change to:
and the Salvage Modifiers Table (see right)

① **Salvage (p. 191)**
Second paragraph

Each 'Mech or vehicle can recover one unit (for 'Mechs, see *Dragging a 'Mech*, p. 99, *TO*), though the unit must be of equal or lesser tonnage than the dragging unit.
Change to:
Each two 'Mechs or vehicle can together recover one unit (for 'Mechs, see *Dragging a 'Mech*, p. 99, *TO*), though the unit must be of equal or lesser tonnage than the dragging units.

Ammunition Quality Table (p. 192)
Quality Rating C

Weapon jams on to-hit roll of 2*
Change to:
Weapon jams on to-hit roll of 2†

Battle Computer (5 Points) (p. 193)
Change the second sentence to read

Each turn one or more such units are on the battlefield and the MechWarrior or crew is conscious, their battle force receives a +2 modifier to all Initiative rolls.

Command BattleMech (2 Points) (p. 193)
Change the second sentence to read

Each turn one or more such units are on the battlefield and the MechWarrior is conscious, their battle force receives a +1 modifier to all Initiative rolls.

Positive Quirk Table (p. 194)
The entry for Improved Life Support should read "No" for Battle Armor and "Yes" for Fighter/Small Craft.

① **Improved Life Support (p. 195)**
Add the following sentence: "This quirk doubles the cockpit's standard life support time (see p. 256)"

Improved Sensors (3 Points) (p. 195)
Change the first sentence to read

A unit with this quirk is treated as if it has an active probe (range 4 for Inner Sphere units, range 5 for Clan units).

Improved Targeting (3, 4, or 5 points) (p. 195)
Replace the second sentence of the paragraph with

The quirk can be applied up to three times, but can be taken only once per range bracket. The cost of the quirk varies with the range bracket chosen as indicated on the Positive Quirk Table (see p. 194).

Exposed Weapon Linkage (2 points) (p. 198)
Change the last sentence to the following:

This quirk can be taken only once and only for a single weapon type, and affects all weapons of that type on the unit (for example, all AC/20s).

① **Poor Life Support (p. 198)**
Add the following sentence: "This quirk halves the cockpit's standard life support time (see p. 256)"

Poor Targeting (1, 2 or 3 Points) (p. 199)
Change the values for this quirk to 2/3/4, to match the table on page 197.

AeroSpace Operations

① **Air (pp. 256-257)**
Fifth paragraph, last sentence on the page

The typical fighter life support system is only meant to last about 96 hours, including oxygen and some drinking water, though most fighters can install extra oxygen tanks.
Change to:
The typical fighter (or 'Mech) life support system is only meant to last about 96 hours, including oxygen and some drinking water (a small cockpit on a 'Mech reduces this to 48 hours), though most units can install extra oxygen tanks.

System Transit (p. 259)
Fourth paragraph

500 million kilometers in an astronomical unit
Change to:
150 million kilometers in an astronomical unit

Warfare Symbology

DIAGRAM TWO — FORMATION SIZE SYMBOL AND EQUIVALENCY TABLE (p. 337)
In the Footnote, change "These units are 150-200% larger" to "These units are 50-100% larger"

DIAGRAM FOUR – COMPREHENSIVE SYMBOLOGY (p. 340)
Change the beginning of the footnote to read "The vertical line on the left…"

Index

S (p. 413)

Change the “Squadron(s)” page references to “27-34, 326-28”.

Tables

Capital Weapons Detailed Ranges Table (page 442)

Change the Long Range Value for the Heavy NPPC from "27-36" to "27-39".

NEW ADDITIONS

These are all the new entries or modifications of old entries for version 2.1 of this document. They may also be found in the **Full Errata** section in the appropriate locations, marked with a ①.

① **Recommended Fighter Squadron Formation Table (p. 28) (also p. 439)**
Add the following new entry: "Free Worlds League 6"

① **Random 'Mech Assignment Table: Minor States 2 (p. 55)**
Under "Light Mechs", "Nova Cats", # 3 result

AF1A Arctic Fox [30] (3067)*
Change to:
AF1A Arctic Fox [30] (3060)*

① **Landing and Liftoff (Expanded) (p. 72)**
Before "Vertical Landing and Liftoff", insert the following new section:

FUEL USE FOR LANDING AND TAKEOFF

When launching from transport bays (per p. 86, *TW*), an aerospace fighter or small craft expends no fuel or thrust for the launch process, having been ejected from the carrier with a speed and heading equal to that of the carrier. As noted in Total Warfare, all of the launched vehicle's thrust is available for use on the turn of launch. This also applies to any large craft undocking maneuvers (see p. 66) and the use of flight decks on a support vehicle.

When recovering to transport bays (see p. 86, *TW*), an aerospace fighter or small craft expends no thrust or fuel points for the recovery process other than the thrust points required to match the heading and speed of the carrier (including any thrust points spent by the carrier during the 5 turns of the recovery process.) This also applies to any large craft docking maneuvers (see p. 66).

When landing on a ground map using a horizontal, rolling landing (see p. 87, *TW*), an aerospace fighter, conventional fighter, aerodyne small craft, or aerodyne DropShip expends no extra thrust or fuel points other than those required to reach the altitude and speed required for landing. This also applies to conventional fighters with VSTOL making a shortened landing run.

When landing on a ground map vertically, any vehicle expends 1 thrust point and fuel point per 0.5Gs of local gravity, rounded up (see p. 55, *TO*). These thrust points are not available for other maneuvers in that turn. This also applies to vehicles landing on a flight deck of a support vehicle, which is generally performed at high thrust levels in case of a failed landing, and to aerodyne DropShips and small craft attempting to shorten their landing run (see p. 87, *TW*).

When taking off from a ground map using a horizontal, rolling liftoff (see p. 88, *TW*), an aerospace fighter, conventional fighter, aerodyne small craft, or aerodyne DropShip expends 1 thrust point and fuel point to put the vehicle on the appropriate hex of the atmospheric map moving at 1 hex per turn. The vehicle may not expend additional thrust that turn, representing the low-and-slow nature of aircraft at the moment of takeoff.

When taking off from a ground map using a vertical liftoff (see p. 88, *TW*), any vehicle expends 1 thrust point and fuel point per 0.5Gs of local gravity, rounded up, and is placed on the appropriate hex of the atmospheric map in a hover (0 hexes per turn). The vehicle may not expend additional thrust that turn, representing thrust being constrained to avoid damaging the vehicle with backblast from the ground during launch.

① **Advanced Sensors (p. 118)**
Under "Naval Comm-Scanner Suite", replace the entire entry with the following:

Naval Comm-Scanner Suite: Double the sensor range for a Small NCSS and apply a –1 modifier to any Detection Check to detect a given unit; triple the sensor range for a Large NCSS and apply a –2 modifier to any Detection Check to detect a given unit (see p. 332, *TO*). NCSS does not affect sensor ranges for emergence wave detection. For other detection types, either modify the maximum listed range and/or modify the range used to calculate penalties as appropriate.

① **Quick Charging (p. 125)**
Example: a habitable planet for a yellow is about ten times closer to the star than the jump points.
Change to:
Example: a habitable planet for a yellow sun is about ten times closer to the star than the jump points.

① **Step 5: Add Weapons, Ammunition and Other Equipment (p. 155)**
Under "Crew Quarters", first paragraph, third sentence

Alternative quarters, may be installed to save on weight, reflecting a more spartan arrangement, such as applying steerage-quality quarters to all crew and passengers, or even allocating crew quarters in the form of a dedicated infantry bay, where the crew sleeps in cramped bunks with no private space whatsoever.
Change to:
Alternative quarters, may be installed to save on weight, reflecting a more spartan arrangement, such as applying steerage-quality quarters to all crew and passengers.

① **Salvage (p. 191)**
Second paragraph

Each 'Mech or vehicle can recover one unit (for 'Mechs, see *Dragging a 'Mech*, p. 99, *TO*), though the unit must be of equal or lesser tonnage than the dragging unit.
Change to:
Each two 'Mechs or vehicle can together recover one unit (for 'Mechs, see *Dragging a 'Mech*, p. 99, *TO*), though the unit must be of equal or lesser tonnage than the dragging units.

① **Improved Life Support (p. 195)**
Add the following sentence: "This quirk doubles the cockpit's standard life support time (see p. 256)"

① **Poor Life Support (p. 198)**
Add the following sentence: "This quirk halves the cockpit's standard life support time (see p. 256)"

① **Air (pp. 256-257)**
Fifth paragraph, last sentence on the page

The typical fighter life support system is only meant to last about 96 hours, including oxygen and some drinking water, though most fighters can install extra oxygen tanks.
Change to:
The typical fighter (or 'Mech) life support system is only meant to last about 96 hours, including oxygen and some drinking water (a small cockpit on a 'Mech reduces this to 48 hours), though most units can install extra oxygen tanks.