CAV™

STRIKE OPERATIONS

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INTRODUCTION

Welcome to CAV: Strike Operations!

CAV: Strike Operations (CAV: SO) is a tabletop sci-fi miniatures game set in an ever-expanding universe nearly 300 years (2274 AD) in our future. Taking its name from the 10+ meter tall war machines that dominate the battlefield, CAV: SO is a game for two or more players that is easy to learn and fast to play.

Using Reaper Miniatures Damage Track system, as models are damaged in combat, their ability to function is downgraded until they are destroyed and removed from play. This allows for large-scale battles to be completed within a reasonable time frame of three to five hours.

As a player in CAV: SO, you will be able to choose from a wide variety of models and factions that will allow you to showcase your own style of play and tactics. Model figures are available to represent the men and machines fighting in CAV: SO that a player may choose to collect, assemble, and paint to bring their battlefield to life. Every game of CAV: SO features a multitude of options to ensure every battle is as challenging as it is fun. The CAV: SO rule book also includes a construction system, allowing for an even greater level of customization.

Make sure to also visit the official CAV: Strike Operations website at **www.cavhq.com** for official news and the latest game information. Besides finding downloadable versions of any charts or record sheets mentioned in the quick-start rules, you can find new game scenarios, fiction, and painting and terrain tips, as well as a FAQ and errata section that is regularly updated with any new information regarding the game.

QUICK-START

The CAV: SO Quick-Start rules are designed to allow you and a friend to jump right into the action. These Quick-Start rules are streamlined to make it easier to learn the basic fundamentals of the game, so some rules and options have been omitted. The CAV: SO rule book contains the full CAV: Strike Operations rules as well as an extensive background to better understand the CAV universe. ▪

CAV: Strike Operations forum:

http://forum.reapermini.com

www.cavhq.com

CONCEPTS

There are a few general concepts players should have an understanding of while reading these rules for the first time and the procedures for handling any rules disputes.

Sportsmanship

While miniature gaming simulates the violence of war between conflicting sides, players should always remember that it is just a game. Players should strive to maintain a level of sportsmanship at all times in every aspect of the game. Games like CAV: SO are designed to provide entertainment and friendly competition, so maintain a good attitude and have fun!

Resolving Rules Issues

No set of rules can include every possible situation that may arise during a game. While we have tried to cover as many contingencies as possible, something will come up that has not been discussed in this rulebook.

If this happens, players should attempt to work out an amicable solution to resolve the situation and keep the gaming moving along. If an agreement cannot be reached quickly, roll for the resolution. Each player rolls 1d6 and the person with the highest roll decides the outcome, rerolling any ties. This resolution will remain in effect for the remainder of the game and applies to any further instances should they arise.

After the game ends, players can take more time to discuss the rule(s) in question and decide how best to handle the same situation in the future. Feel free to contact us as well with any questions or concerns. CAV: SO is a game that is always improving and your feedback will only make it better.

Models, Squads, and Force Groups

In CAV: SO the term "model" refers to any single-based miniature in use during a game session or—in the case of infantry figures—multiple figures mounted on the same base.

The squad is the basic level of organization in CAV: SO and is made up of two or more models of similar form or function. Models in a squad activate at the same time and complete all of their actions together.

A force group is a combination of all the squads in play during a game session belonging to a single player or team.

Force Group Example

Model Basing

To help facilitate easier game play, it is recommended that all CAV: SO models are mounted on a base. The addition of a base aids in stability and will assist in measuring distances. It is suggested that a hex-base (6 sides) is used as this shape is ideal for determining base-to-base (B2B) contact and model facing.

Base-to-Base Contact

Certain actions by a model during a game require it to be in base-to-base (B2B) contact with another model (friendly or enemy). A player must declare their intent to move a model into B2B contact at the beginning of their activation, before any movement is made. B2B contact is determined by bringing any point of a model's base into contact with any point on the base of the other model. If a model is sized to prevent actual contact, move the model in as close as possible. B2B contact with another model immediately ends the current move action of a model. Models may perform any other action(s) when in B2B contact with another model (friendly or enemy), including moving away from B2B contact provided neither model has initiated or has been part of a **close-combat** assault.

Aircraft models in flight can never be in B2B contact.

Model Basing & B2B Example

FIELD NOTES

Close-Combat

The modern battlefield is a symphony of high-tech gadgets and fire and forget weapons, making it sometimes easy to forget the brutality of what war really is.

Close-combat in CAV:SO is not hand-to-hand combat per se, though it is an element of what transpires when two enemies collide up close. Close-combat attempts to simulate the chaotic nature of close quarters fighting as both sides seek an opportunity to outmaneuver and over-power an opponent.

For now, understand that close-combat is typically not the preferred method of attack for most model-types and once initiated, both sides remain locked in combat, fighting to the death or one side attempts to break and retreat.

THE RULES

Model Facing

A model's base is used to determine the facing of every non-infantry model (infantry models have no facing). For models using a hex base, the flat side closest to the "front" of a model, is considered its front facing. If a model does not have a hex base, make sure everyone playing understands what is considered the front of the model. The exact facing of a model is very important when determining its perspective in relation to its current location on the game board, allowing the controlling player to direct any actions it may make during an activation in the correct direction.

Scale and Measurements

Models for CAV: SO are 1/180th figure scale, with each inch of the gaming surface representing approximately 15 feet (4.57 m). All terrain should be sized accordingly to compliment the miniatures available for CAV: SO and players will find that "N-Scale" sized terrain (available for model railroading) is a good fit for use in CAV: SO.

Any distance values in CAV: SO (such as movement or ranges) are in inches. It is recommended that rulers and/or tape measures be used when making any measurements. All measurements are made from and to the edge of the base of a model from the side facing the direction in question.

Turns

In CAV: SO the flow of a game is dictated by turns. Each turn represents a period of "real time" in respect to the game universe, but the actual time of a turn during a playing session will vary as players activate and conduct the various actions for each of their squads.

Each turn is broken down into three rounds to better manage the flow of events during a game.

A Note on Scale and Time

While CAV: SO tries to follow many real-world thoughts and processes, it must be remembered that it is just a game. As a result, some abstractions must be made for the sake of playability. So don't get hung up worrying about physics or other mechanics and just have fun!

The Dice

CAV: SO uses three types of dice, a six-sided die (abbreviated as d6), a ten-sided die (d10), and a twelve-sided die (d12), to generate random numbers or track the results of actions during the game.

Most events during a game require rolling two six-sided dice (2d6) and adding the results together to generate a number range of 2–12.

Various game situations may require a **situation modifier** or the addition (+) or subtraction (-) of an amount, expressed by a number or notation after the die roll indicated.

For example, 2d6+2 indicates that a "2" will be added to the total amount rolled on two six-sided dice.

A ten-sided die (d10) is used when making a drift roll to determine the direction and distance of an attack that misses its intended target area.

A twelve-sided die (d12) is used to track the current damage level of a model during the game and is placed behind each model on the playing surface.

Types of Dice Rolls

To determine the success or failure of any action during the game, one of the following three methods will always be used as described below:

● **Target-Point Roll:** A target-point roll requires a player to roll 2d6, adding or subtracting any applicable modifiers. If the final result is equal to or greater than the given target point value, it is a success. The amount a target-point roll succeeds by is often important and is referred to as the margin of success (MoS).

● **10+ Roll:** The 10+ roll is a variant of the target-point roll and while a player will still roll 2d6, a "natural" roll of 10 or better is always a success regardless of any (-) situation modifiers.

● **Opposed Roll:** The opposed roll requires players from both sides to each roll 2d6, applying any situation modifiers to their own die roll. The player with the highest modified roll is the winner. In the case of a tie, the player that initiated the action wins.

Note: *Make sure when rolling any dice that the results can be seen by everyone playing the game. Take care not to damage or move any miniatures and/or terrain while rolling. Should one or more dice fall off the game table, re-roll both to determine the final result.*

Critical Failure and Success

Anytime a 2d6 dice roll is called for during the game and a "2" is rolled, it is considered a critical failure. A roll of "12" is a

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FIELD NOTES

Situation Modifier

Situation modifiers are used in CAV:SO to provide a bonus (+) or a penalty (-) to a die roll and represent a variety of game situations that can affect the overall success of a desired action.

A situation modifier is expressed as a value after the indicated die roll type, the amount being added (+) or subtracted (-) from the actual roll. ■

critical success.

Critical failures always result in an automatic failure for whatever is being determined by the roll and may have additional consequences as detailed throughout these rules.

A critical success is not an automatic success, but does allow the player to roll an additional 1d6 and add that to their dice roll as a (+) situation modifier.

Rounding

When rounding any fractional numbers in CAV: SO, values of .5 or greater are always rounded up to the next whole number and values of .49 or lower are always rounded down.

The Data Card

Every model in CAV:SO has a unique data card that displays the capabilities and stats for its use during a game.

The following list is provided as an overview of the data card; specific terms and concepts are detailed later in the game rules.

1 Model Name: The specific name and variant (if applicable) of the model being described.

2 Model Type: The specific type of model (CAV, combat vehicle, etc.) being described.

3 Model Task: Every model has an assigned task it performs as part of a squad. These symbols denote what task the model being described has been assigned:

    ✕ **ATTACK**

4 Damage Track: The damage track of a model is a series of columns that represent the amount of damage the model being described can take before being destroyed.

As a model takes damage (moving left to right) its effectiveness degrades, the values under the current track being used to determine any game-based

results. Once a model has received more damage than it has damage tracks left, it ceases to function and is removed from play.

5 Model Movement Value & Class: The movement value is how far the model being described may move, in inches, across open terrain during a single action.

The movement class refers to mode of transportation a model uses when it does move (foot, wheeled, etc.).

5 Armor Value: The armor value of the model being described is used as a target point by an attacker when making a combat roll during a ranged assault combat action. This value is a representation of how hard a model is to damage.

5 Close-Combat Value: The close-combat value of the model being described is the base number to use when making an opposed roll for a close-combat attack.

Two values are provided, one for **hard targets** and one for **soft targets**.

DICTATOR-B ☐ CAV

[DAMAGE TRACK]	0	1	2	3	4	5	6	7	8	9
MOVE (WALKER)	5	5	5	4	4	4	4	3	3	3
ARMOR	8	8	7	7	6	6	5	5	4	4
CLOSE-COMBAT	5/5	5/5	4/4	4/4	3/3	3/3	3/3	2/2	2/2	1/1
DAMAGE CONTROL	-	-	4	4	3	2	1	0	-1	-2

[WEAPONS]

MEDIUM MAC 6/2 6/2 5/2 5/2 5/2 4/1 4/1 4/1 3/1 3/1
x2 (L/R), RNG (12), AMMO, BLASTER 1, MIN RNG (1), STRIKE, PIERCING

LIGHT GM 4/4 4/4 4/4 3/3 3/3 3/3 3/3 2/2 2/2 2/2
x1 (L), RNG (16), IMPROVED RANGE, LIMITED AMMO, MIN RNG (14), SHOCK (4)

LIGHT R10 3/3 3/3 3/3 3/3 2/2 2/2 2/2 2/2 2/2 2/2
x1 (R), RNG (14), AOE 1, INDIRECT-FIRE, LIMITED AMMO, MIN RNG (12), RAVAGE, SMART

[SPECIAL ABILITIES & ATTRIBUTES]

ADVANCED TARGETING COMPUTER 1, AMMO BIN 1, HARD, REINFORCED 1, WIZZO, IMPROVED ARMOR

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FIELD NOTES

Hard & Soft Targets

Hard and soft targets refers to a specific special ability or attribute a model may have as part of its description.

Special abilities or attributes (SA) are used in CAV:SO to help make a model more "unique" and provide a means to highlight different capabilities or equipment a specific model-type may have. A SA will generally improve a model's performance but may also provide for a limitation or specific rule that may affect the model during play.

A model with the SA: *Hard* is considered a hard target, which is a military term for an heavily armored or well defended installation. Examples of a hard target include all CAVs, heavier combat vehicles, bunkers or other reinforced buildings and structures.

A model with the SA: *Soft* is just the opposite, lightly defended or armored, examples of which would be all aircraft and infantry, light combat vehicles, and standard buildings and structures. ◾

THE RULES

5 Damage Control Value: Many models have the ability to make limited field repairs during combat in an attempt to bring damaged systems back online. Using the repair action, the model being described will make a 10+ roll, adding the current damage control value to the roll as a (+) situation modifier.

6 Weapons Data: This section details the weapon systems the model being described is equipped with.

This description includes the type of weapon system, using the following abbreviations:

GM	*Guided Missile*
MAC	*Magnetic Accelerator Cannon*
R	*Rocket*

Additionally the ranged assault value (RAV) of each weapon system is included. This value, one for hard targets and one for soft targets, is added to a successful combat roll to determine if the attack has penetrated the armor value of the intended target.

The higher a weapon system's RAV, the more likely it is able to inflict damage.

Also included are the number of weapon systems of each type on the model, their mounting location, the base short range, and any other SAs the weapon system may have.

Mounting Location Abbreviations:

CAV
(L/R)   *Left and/or Right Arm*

7 Model Illustration: To help players identify the model being described an illustration has been included on each data card.

8 Special Abilities & Attributes: SAs represent any special attributes the model being described may possess.

9 Threat Value: The threat value of the model being described is used a numerical rating that helps define the overall "worth" of a model, allowing a comparison from one model to another of its relative strength.

The threat value is used when building a player's force group in an attempt to create a more evenly matched game.

Getting Started

CAV: SO can be played a variety of ways but a typical game is for two players to match forces across an area that is referred to as the game-board, using the following rules for terrain selection or any set-up agreed on by all of the players prior to play.

Terrain Selection

A typical CAV: SO game should be played on a game board with an area measuring 48" x 48" at the bare minimum in order to allow plenty of maneuvering room for your models. A larger playing surface is recommended if you are using a large number of models on both sides.

When choosing terrain to set on your game board, you are limited only by the preferences and imagination of the players themselves. The most important part during set-up is to make sure any terrain feature is clearly defined and understood by every player before play begins. A terrain feature should cover an area with a diameter of around 6" at least; unusual shapes (the "kidney bean" or the "dog bone" seems to be war-game staples) can be used as well

A game board can be as simple as a sheet thrown over a few books to represent hills. Other terrain features can be added by cutting up construction paper or felt into the shape you want to define the borders of a certain terrain-type. Model railroad buildings, trees, and such are also available, as well as several commercially designed terrain systems that add a level of realism to a game that is well worth the cost and effort.

Terrain Selection Table

The following **Terrain Selection Table** can be used to generate a random board set-up. Each side will roll 1d6+1 to determine the number of terrain features each team will place then, roll 2d6 to select which type of terrain they may place.

DICTATOR-B — CAV

[DAMAGE TRACK]	0	1	2	3	4	5	6	7	8	9
MOVE (WALKER)	5	5	5	4	4	4	4	3	3	3
ARMOR	8	8	7	7	6	6	5	5	4	4
CLOSE-COMBAT	5/5	5/5	4/4	4/4	3/3	3/3	3/3	2/2	2/2	1/1
DAMAGE CONTROL	-	-	4	4	3	2	1	0	-1	-2

[WEAPONS]

MEDIUM MAC 6/2 6/2 5/2 5/2 5/2 4/1 4/1 4/1 3/1 3/1
x2 (L/R), RNG (12), AMMO, BLASTER 1, MIN RNG (1), STRIKE, PIERCING

LIGHT GM 4/4 4/4 4/4 3/3 3/3 3/3 3/3 2/2 2/2 2/2
x1 (L), RNG (16), IMPROVED RANGE, LIMITED AMMO, MIN RNG (14), SHOCK (4)

LIGHT R10 3/3 3/3 3/3 3/3 2/2 2/2 2/2 2/2 2/2 2/2
x1 (R), RNG (14), AOE 1, INDIRECT-FIRE, LIMITED AMMO, MIN RNG (12), RAVAGE, SMART

[SPECIAL ABILITIES & ATTRIBUTES]
ADVANCED TARGETING COMPUTER 1, AMMO BIN 1, HARD, REINFORCED 1, WIZZO, IMPROVED ARMOR

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TERRAIN SELECTION TABLE

Result	Terrain Type
2	Special
3	Water
4	Heavy Woods
5	Light Woods
6	Hill
7	Hill
8	Hill
9	Light Woods
10	Rough or Rubble
11	Structure
12	Special

ROLL 2D6

Terrain Type Descriptions

● **Special:** The special selection allows a player to place a "unique" item from the available terrain supplies on the game board. This could be a swamp/marsh area, a flowing lava stream, or any other terrain type not found on the **Terrain Selection Table**. A player may also choose any other terrain type from the selection table.

● **Water:** The water selection allows for a small pond, lake, river, or stream section. Multiple rolls can be added together (from both sides) to increase the overall area covered.

● **Heavy Woods:** The heavy woods selection allows for a "grove" of trees providing heavy cover. Multiple rolls can be added together (from both sides) to increase the overall area covered.

● **Light Woods:** The light woods selection allows for a "grove" of scattered trees or scrub providing light cover. Multiple rolls can be added together (from both sides) to increase the overall area covered.

● **Hill:** The hill selection should be used to allow a player to build a hill with one or more elevation levels on the game board. While there is no set limit on the size of the hill, players should avoid building their own "Mt. Everest" in the middle of the board without first consulting with the other players.

● **Rough/Rubble:** This selection allows for an area of rough terrain or one or more destroyed structures. Multiple rolls can be added together (from both sides) to increase the overall area covered.

● **Structures:** The structures selection allows for one or more non-battlefield asset-type structures to be placed on the game board. Multiple rolls can be added together (from both sides) to increase the number of structures, allowing for a larger city to be built. Players are encouraged to add roads for a greater degree of realism to the terrain set-up.

Scenario

The quick-start rules will use the following scenario for your first game of CAV: SO. Additional scenario types are included in the main rule book and at *www.cavhq.com*.

Each scenario includes a brief description, any special rules required, the **deployment zone**, and the victory conditions needed to win the match.

Scenario: *Stand and Fight!*

● **Description:** An all-out, winner-take-all brawl.

● **Special Rules:** None.

● **Threat Value:** Each side will receive a Dictator-B CAV.

● **Deployment:** Standard.

● **Victory Conditions:** The battle continues until only one side remains, either through attrition or concession.

FIELD NOTES

Deployment Zone

Regardless of the scenario being played or the required set-up for the battle, each player or side must have a designated starting edge before play begins, opposite of each other.

This starting edge is referred to as the deployment zone and is an area that runs the length of the game board along each player or side's starting edge, extending six inches into it.

If a scenario does not designate a specific area for the placement of models, each player or side will need to roll 2D6. The high roller (in case of a tie, re-roll until there is a winner) selects the starting edge for their deployment zone.

THE RULES

Winning the Game

The *Stand and Fight!* scenario uses the following criteria when determining the winner of a match. Play will continue until only one model remains.

- **Destroyed:** A model that has no remaining damage tracks at the end of the last turn is considered destroyed.
- **Retreat:** A model that leaves the playing surface for any reason cannot return to the game.
- **Mission Kill:** Only the most fanatical members of a military force will fight "to the bitter end" in a battle, while the majority will seek to get away after they can no longer contribute to the fight. Any model that can no longer use the combat action or perform its primary task (attack) is considered a mission kill.

Once a model has been designated as a mission kill, it must retreat from the playing surface at maximum speed to the nearest game board edge.

The Draw Deck

The draw deck is a deck of normal playing cards used to determine the order that models from both sides are required to activate during play. As activated, each model may perform any action allowed to it.

Generally, one model will be designated "Red" and the other "Black" (if more than two "sides" are fighting in the same fight, designate each one by suit). For each model, one card of the appropriate color needs to be added to the draw deck. Once the deck is assembled, shuffle the cards and place them in a stack face down. Beginning with the first turn, simply flip over the top card to see which side is required to activate the next model.

Removing Cards from the Draw Deck

Whenever a given squad is removed from play, due to battle damage or assimilating into another squad through the regroup action, a card is removed from that force group's draw deck during the end phase of the current turn.

Any bonus cards are removed from the draw deck if the specific activity assigned to that card is no longer in play as well.

Deploy!

To begin deployment someone will need to shuffle the draw deck and place it face down on the gaming surface. Draw the top card and turn it over, revealing the color or suit of which player must place their model first. After the selected model is placed, the next card is drawn and placement continues on until all of the models have been deployed.

Playing the Game

Each player or side should have completed the following:

- Chosen the scenario to be played.
- Set-up the game board with terrain.
- Selected the models for each player.
- Provided data cards for each model.
- Assembled the draw deck.
- Placed all of the models in their appropriate deployment zone.

The battle is ready to begin!

The Game Turn

A game of CAV: SO is fought in a series of turns with each model alternating their activations as dictated by the draw deck. Game turns continue until one side "wins" the game.

Any game effects with a duration of one turn remains active until the next activation of the model that initiated the event.

While each game turn can be a whirlwind of activity, the following sequence of play structures each turn into a series of phases performed in the indicated order until the game is over.

- **Start Phase:** Shuffle the draw deck, place it face down on the playing surface, and flip over the top card, indicating which side must activate their first model.

- **Activation Phase:** Once the first card is flipped over from the draw deck, the color (or suit) of the card indicates the side that must activate their first model.

When the model has performed all of its available actions, a new card is drawn and play continues. As a model may only be activated once per turn, ignore any extra activation cards belonging to that player if there are no more models to activate. If all of the models for each player have been activated, no more cards are drawn and proceed to the next phase.

- **End Phase:** After all of the models have been activated, both sides should determine if the conditions for ending the game have been met and, if so, decide on a winner.

Players will need to make adjustments to the draw deck for any models that may have been eliminated from play and begin the next turn's start phase.

Action Points

Every model begins a game of CAV: SO with two action points (AP) to use each turn. Once a model has been activated, a player may choose to use a model's action points to perform one or more actions from the **Action List Table**.

Most actions require only one action point to perform and once an action point is used, it is gone for the remainder of the turn. Action points not used by a model during its current activation cannot be saved or transferred to another model and are lost.

At the beginning of a new start phase, all models have their action points reset.

Action Types

In CAV: SO there are three types of actions:

●   **Free Actions:** Free actions are actions provided by a specific game rule that are allowed during a model's activation but do not require using a model's action points to use. How to use a specific free action will be included in their description.

●   **Repeatable Actions:** Repeatable actions are actions that require spending one or more action points to use, but may be used more than once during a model's activation.

●   **Non-Repeatable Actions:** Non-repeatable actions are actions that require spending one or more action points to use, but may not be used more than once during a model's activation. A model may use two different non-repeatable actions during the same activation.

Example: A model, during its activation, could spend two action points to perform the target-lock action and follow it with the combat action as they are two different non-repeatable actions.

Declaring Actions

The first step in performing one or more actions is for the controlling player to announce which actions a model is using to their opponent. Once the action(s) have been declared, you may begin to resolve them as allowed by these rules.

If an enemy model is destroyed before another model has had a chance to resolve their declared action(s), those actions are lost.

Resolving Declared Actions

Once a player has begun resolving any declared action(s), they cannot stop and change their declaration.

You are not allowed to pre-measure any distances on the game board until after you have declared your action(s). If you declare an action and then find you are unable to complete the action for any reason, you must try to perform as much of the action as possible, within the scope of these rules. If you are unable to perform any part of the declared action, that action is

forfeit.

Option: To help track which models have used their action points for the current turn, each model's d12 damage die can be placed in the front of each model at the start phase of a turn. Once a model's action points have been spent, move the d12 to the rear of the model's base to indicate its completion.

Action List

Players have a range of actions to choose from and there is no set order in which a player must use their action points.

The following action list provides the available actions a model may use and the page number where a more detailed description can be found:

ACTION LIST TABLE

Free Actions
● Facing Change (p. 9)

Repeatable Actions
● Move (p. 8)
● Facing Change (p. 9)
● Break (p. 17)

Non-Repeatable Actions
● Combat (p. 12)
● Target-Lock (p. 15)
● Repair (p. 20)

The Move Action

The move action is used by every model in CAV: SO to change their position on the game board during play. A model's movement class, various types of terrain, and battle damage can affect the actual distance it may move in any given turn.

Typically, for each move action used, an activated model may move a number of inches forward in open terrain equal to the move value (MV) of a model's current damage track as detailed on their data card.

●   1 MV point equals 1" of movement.

Example: A model that uses two action points to perform the move action with a MV: 8 could move forward 16" in open terrain.

Facing

A model's facing is determined by the direction the "front" of the model is orientated on the game board. The facing of a model affects movement and a model's **firing arcs** (see p. 9).

Every player must be aware of what constitutes the front-facing side of a model in play to avoid any misunderstandings

THE RULES

so take a minute before play and make certain everyone understands what is "front" on every model.

Facing Change

A facing change is used to change the orientation of a model's "front" from one direction to another. For each declared move action, a model may make one free facing change up to 90-degrees left or right.

Any additional facing changes will cost the model 1 MV each (regardless of the terrain type the model is currently occupying). A model can make as many facing changes as it wishes in a turn, provided it has the required MV available to do so.

Measuring Movement

To avoid moving too far (or short!) when conducting the move action, all measurements are measured from the "front" of every model's base.

A model using the move action is not required to move its full move value. If a model chooses to move a shorter distance when using a move action, it still requires one action point to be used.

Example: A player declares they are using the move action for a model (MV: 8) to move towards cover, 4" away. After completing the desired move, the player chooses to end the model's movement, discarding the remaining 4" of MV, still using one action point.

Stacking

A model can only move next to or between other models and terrain where its base can physically fit. At no time may the base of one model overlap or "stack" another model's base unless:

● Both models are on differing elevation levels, such as different floors in a structure.

If a model is not equipped with a base, use the width of the model plus ¼" on either side as a guide to the area it occupies during movement.

Movement: Terrain Effects

The effect terrain may have on a model is determined by the type of terrain being traversed and the model's movement class. Terrain effect modifiers apply when any part of a model's base comes into contact with a given terrain type during the move action.

A model must pay the movement cost in MV for each full inch moved on the game board as detailed by the **terrain effect modifier table**.

Movement Class

The movement class determines how well a model can negotiate a given terrain type or obstacle that it may encounter while using the move action:

● **Walker:** A walker model uses two or more articulated legs to walk across the ground.

TERRAIN EFFECT MODIFIER TABLE

Movement Class	
Terrain Type	**Walker**
Open	1
Road/Paved	1
Rough/Broken	2
Rubble	2
Light Woods	2
Heavy Woods	3
Swamp/Marsh	4
Water 1	2
Water 2	NA
Structure	NA
Hills	1

FIELD NOTES

Firing Arcs

The current facing of a model determines the orientation of a model's firing arcs. Firing arcs are used during combat to determine which weapon systems can fire at a target. There are four firing arcs as detailed in the following diagram:

FRONT

REAR
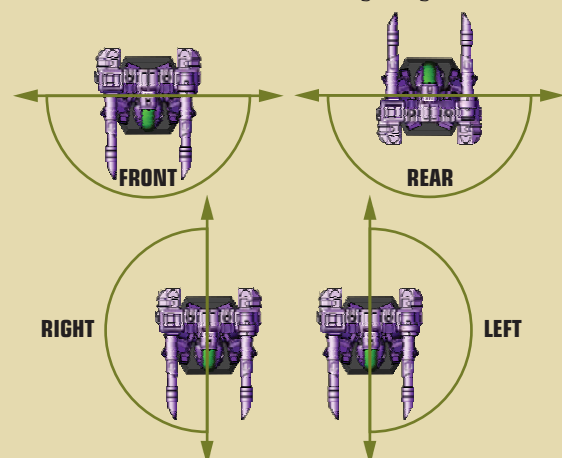
RIGHT

LEFT

CAV models may rotate their firing arcs up to 90-degree left or right by twisting their torso. This is a free action that may be performed once per turn.

Note that firing arcs extend to the edge of the game board and are only limited by the range of the weapon system being used. ■

Terrain Type Descriptions

The following is an overview and description of the majority of terrain types to be found on a game board and how they can affect a model while using the move action.

As detailed during game set-up, make sure that every terrain type is clearly marked by a boundary of some kind to designate the area occupied by it.

● **Open:** Open terrain is an area of the playing surface that provides unobstructed movement and vision to the model crossing it.

An open area represents firm ground that, while it may be slightly inclined, does not change elevation severely enough to impede a model's movement.

Examples of open terrain are grasslands, fields, and prairies.

● **Road/Paved:** A road or paved area is a prepared surface allowing for easier movement through other terrain types.

If a model spends their entire move action along a road or paved area, they do not have to use any additional MV for the other terrain types they may be moving through.

● **Rough/Broken:** Strewn with rocks and sharp drop-offs, an area that is defined as rough or broken slows down a model's movement significantly. More care must be taken with each footstep to avoid being thrown off-balance.

The ground is firm and does not change elevation significantly.
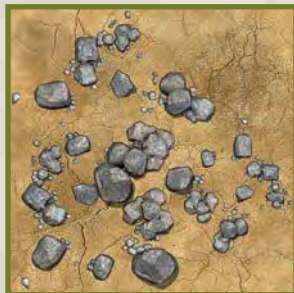
● **Rubble:** Large rocks, heavy undergrowth, and/or chunks of broken ferrocrete and twisted durasteel cover the ground below, making crossing these type of areas very dangerous.

● **Light Woods:** Light woods is an area of ground covered with scattered trees, hedgerows, and shrubs.

Light woods require a model to slow down, avoiding hitting a tree or making a misstep that could cause damage to their machine.

● **Heavy Woods:** Heavy woods is an area of ground covered by larger, more densely packed trees, slowing movement and obstructing vision.

Heavy woods require a model to spend more time navigating through the trees and the undergrowth below.

● **Swamp/Marsh:** Swamps and marshes are muddy areas, typically with heavy vegetation, that restrict the movement of models as they move through the muck and mire.

Swamps and marshes are typically found in slow-moving or standing water.
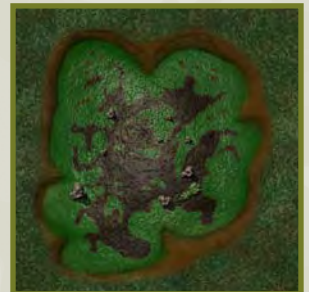
● **Water:** Water is an area covered by oceans, seas, lakes, ponds, streams, or rivers.

Water is defined by:
depth 0 (less than 5' deep)
depth 1 (less than 10' deep)
depth 2+ (greater than 10' deep).
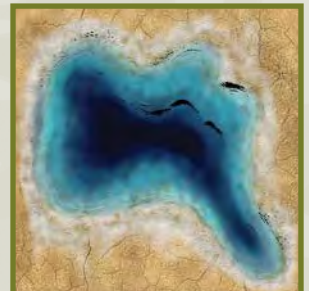
● **Structures:** Most non-hardened structures cannot support the weight of CAVs and will collapse if one tries to move through or over these areas, reducing them to rubble and risking damage from cave-ins and falling debris.

Larger structures, such as factories, warehouses, or armories with sufficient **elevation levels**, may have doors and floor space large enough inside for CAVs to enter and move around in.

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Example: *The above CAV model is trying to move from open terrain to the far side of a light woods terrain object. The first 2" moved would require 2 MV as it is still in open terrain but, once the model's base touches the light woods, it would spend 2 MV for **each** inch moved (as indicated on the terrain effect modifier table for a CAV model) . Each additional inch moved in the light woods area would also cost 2 MV.*

Combined Terrain Effect Types

Some terrain types can occupy the same area (such as an open area with a hill or light woods in a swamp), making it even harder to traverse. When this occurs, a model will use the terrain effect with the higher movement value and add an additional 1 MV for each extra terrain effect to determine the overall cost of moving through that area.

Example: *The CAV model below wishes to move through an area occupied by a swamp and a light woods terrain object. The first 2" is open terrain, requiring only 2 MV to move through. The terrain effect modifier table indicates a swamp/marsh terrain object costs a CAV model 4 MV and a light woods 2 MV. Using the higher MV cost (the swamp) and adding +1 for the addition of the light woods, once the model's base touches the combined terrain area, each additional inch moved would cost 5 MV!*

If a combined terrain effect area includes a road or other paved terrain object, a model will ignore any other terrain effect that may also occupy the same space as long as the model moves continuously on the road/paved terrain type.

In the event the MV cost to move only one inch surpasses a model's movement value for a single move action and the model is not prohibited from entering a particular terrain type,

a model may always move forward 1" per move action spent, regardless of the actual cost in MV.

Other Movement Options

Moving Backwards

A CAV model may only move backwards through the following terrain effect types by spending an additional +1 MV per inch moved in reverse.

- Open
- Road/Paved
- Rough/Broken

FIELD NOTES

Elevation Levels

Every model, structure, hill, and any other object or obstruction in CAV: SO is measured in elevation levels(E). Elevation levels are important during movement as they are used to determine if a model is eligible to move up or over a terrain type that raises above an adjoining area.

Each elevation level is ten feet tall. A model is only allowed to change one elevation level per 1" moved.

●**Hills:** A hill is a E1 terrain effect that raises above the surrounding terrain, sloping to a relatively "flat" summit.

A hill increases the terrain type being crossed by +1 MV whenever a model moves up one elevation level to the next. Going down does not incur any additional cost.

● **Obstructions:** Obstructed terrain, such as cliffs, sink holes, or large boulders, prevent any type of movement through it by ground-based models.

Destroyed Models!

CAVs do not simply disappear from a game board when destroyed; they become fixed terrain obstacle upon their demise until the end of the game.

Use a "destroyed model" counter (or whatever token you may wish)to mark the model's final resting spot and treat the area as rubble for any other model that may wish to move through the indicated area at a later time. ■

Any other terrain types permitted to that model require an additional +2 MV per inch moved in reverse.

Going Prone and Standing-Up

A CAV model may use a single move action to "go prone" in an effort to avoid being seen. A model may not perform any other action type while prone except to stand back up.

A prone CAV model may use a move action to stand-up. Once a model stands-up, it may choose any direction to face and, if available, perform an additional action.

Additional information on how the move and combat action interact during play can be found under the combat section of these rules.

The Combat Action

The combat action is used by every model in CAV: SO to perform either a ranged or close-combat assault during their activation in an attempt to destroy the enemy.

Declaring Targets

Before resolving any combat actions, the attacking player must declare the following to the defending player for the activated model:

- Is the model using the combat action during its activation?

- Which enemy model is being targeted.
- What kind of an assault is being attempted, ranged or close-combat.

Note: *Any assault using the combat action must be declared before any measuring is allowed. If a declared assault cannot be completed for whatever reason, it is an automatic miss and play continues.*

The Combat Roll

A single 2d6 die roll is used to determine if an assault has successfully "hit" a declared target and the damage done (if any) and is referred to as the **combat roll**.

- Ranged assaults will always use a target-point roll when making a combat roll, adding or subtracting any situation modifiers.
- A close-combat assault will always use an opposed roll when making the combat roll by both the attacker and defender, adding or subtracting any situation modifiers.

The Margin of Success

The amount a combat roll equals to or exceeds a required target-point or opposed roll number is referred to as the margin of success (MoS). The margin of success is used to determine the amount of damage (if any) done to a model from a successful "hit".

Ranged Assault

A ranged assault is used by a model to attack a target with one or more eligible weapon systems that it is not currently in B2B contact with. There are two types of ranged assaults:

- Direct-Fire (DF): A direct-fire ranged assault requires a valid LoS between the attacking and defending models.

Any weapon system without the SA: *Indirect-Fire* may be used as part of a direct-fire assault.

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The Combat Roll (definitions)

Typically you will see a combat roll annotated with the terms primary or secondary.

A primary combat roll is used when a combat action is specifically targeted at one model, such as a direct-fire ranged assault or a close-combat assault.

A secondary combat roll is used when a combat action results in one or models being targeted due to their proximity to the attack, such as a indirect-fire ranged assault using the SA: *AoE*.

Both terms are used to determine which situation modifiers may be applicable to a particular assault being rolled for as detailed throughout these rules.

● **Indirect-Fire (IF):** An indirect-fire ranged assault does not require a valid LoS between the attacking and defending models.

Only Guided Missiles or a weapon system with the SA: Indirect-Fire may be used as part of a indirect-fire assault.

Note: *A model may only perform one ranged assault type when using the combat action during its activation.*

Other models in the same squad can choose to use different ranged assault types.

Line of Sight

The battlefield is a cluttered place, full of things that make seeing the enemy that much harder. When playing a game of CAV: SO you need to be aware of what you can (or cannot) "see" in order to attempt some actions. This is where line of sight (LoS) comes into play.

Checking Line of Sight

Every model or terrain object in CAV: SO occupies a set amount of space that is defined by the base of the model or terrain object that designate's its physical location on the game-board and the volume of space directly above equal to its current elevation level.

Common elevation levels in CAV: SO are:
● CAVs (elevation 3)
● Prone CAVs (elevation 1)
● Light and heavy woods (elevation 3)

To check LoS between two models, draw a straight line (a string works well for this) from the closest side of each model's base facing one another. If this "line" is free of any other models or terrain objects, then line of sight exists and both models can "see" one another.

If this line crosses certain terrain objects or other models, line of sight may be obstructed or blocked (see Cover).

Always remember the golden rule, "if you can see it, it can see you"!

Cover

During a ranged assault, other models and terrain objects may provide cover, partially obstructing or blocking line of sight between an attacking model and its target.

Before play begins, players should determine what on the game-board may be used for cover and the type of cover it is:
● **Light Cover:** An object designated as light cover provides a (-1) situation modifier. Example: *Light Woods.*

● **Heavy Cover:** An object designated as heavy cover provides a (-2) situation modifier. Example: *Heavy Woods.*

● **Blocking Cover:** An object designated as blocking cover prohibits a valid line of sight. Example: *CAV Models.*

Cover along line of sight between two models is only counted if:
● The total elevation level of the cover object is equal to or higher than the total elevation level of both models; or
● The cover object is adjacent (within 1") to the attacking or defending model's base; or
● The defending model is "standing" in the cover object, regardless of either model's total elevation level.

The total elevation level of a model is its base elevation level PLUS the elevation level of the terrain type it currently occupies.

Example: *A CAV model (E3) standing on a elevation 2 hill would have a total elevation level 5.*

Cover and Guided Missiles/Rockets

A ranged assault with guided missiles and/or rockets does not require a valid LoS before making the combat roll. As a result, an attack with these weapon systems will ignore any intervening cover with the exception of cover a defending model may currently be "standing" in.

Cover and Other Models

CAV models may be used for cover when located along the line of sight between an attacking and defending model.

A CAV model behind a prone CAV, in relation to line of sight, and is adjacent (within 1") will receive a light cover situation modifier.

Example: *A CAV model (E3) is behind a prone CAV model (E1) and within 1" of it. While LoS is not blocked, the CAV would receive a light cover situation modifier to any attacker's direct-fire ranged assault if LoS tracked through the prone CAV model.*

Range Bands

While the many weapon systems in CAV: SO have the ability to "shoot" a very long way, the modern battlefield is filled with a myriad of "hazards" designed to foil a successful attack. Constant jamming and electronic "viruses" are just a few of the more common targeting hazards an attacking model must deal with. Range bands are used to represent these hazards.

Every weapon system listed on a model's data card has its short range band value (RNG) displayed as a numeric value in inches. Each additional range band adds this same value to its overall total. To determine which range band to use, measure in inches from one model's base to the other, using the side facing one another and compare to the weapon system's RNG value.

Each range band provides the base target-point number used by an attacker during a direct-fire ranged assault combat roll. For indirect-fire ranged assaults, a range band will provide a situation modifier to the strike-point roll (p. 14) only.

Range bands are not used for a close-combat assault.

- **Short Range Band:** The short range band is equal to the base RNG value listed for each weapon system on a model's data card.

A **target point roll (6+)** is used when making a combat roll for a weapon system firing inside the short range band.

- **Medium Range Band:** The medium range band is equal to twice the RNG value listed for each weapon system on a model's data card.

A **target point roll (7+)** is used when making a combat roll for a weapon firing inside the medium range band.

- **Long Range Band:** The long range band is equal to three times the RNG value listed for each weapon system on a model's data card.

A **target point roll (8+)** is used when making a combat roll for a weapon firing inside the long range band.

- **Extreme Range Band:** The extreme range band is equal to four times the RNG value listed for each weapon system on a model's data card.

A **target point roll (9+)** is used when making a combat roll for a weapon firing inside the extreme range band.

NOT TO SCALE
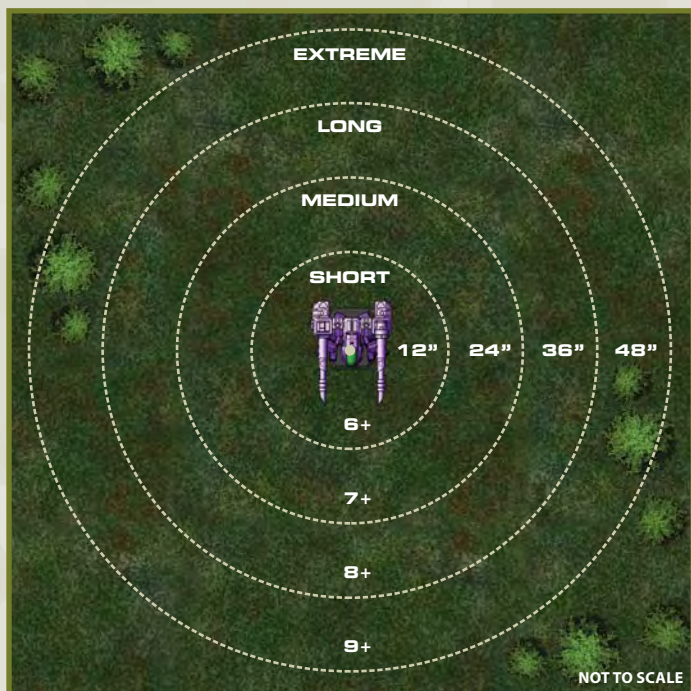
Example: A weapon system with a RNG 12 would use the following range bands:
- *Short 0-12"*
- *Medium 12.01-24"*
- *Long 24.01-36"*
- *Extreme 36.01-48"*

Point Blank Range

Any direct-fire ranged assault at a target 3" or less will receive a (+1) situation modifier to any combat roll regardless of the range band indicated.

SA: *Minimum Range*

A weapon system with the SA: *Minimum Range* cannot be used for a ranged assault if the target is equal to or closer than the listed value regardless of the range band indicated.

Strike-Point Roll

As already noted, weapon systems with the SA: *Indirect-Fire* do not require a valid LoS in order to conduct a ranged assault as they are used to target a specific area on the game-board as opposed to an enemy model. This desired target area is referred to as the strike-point.

After declaring the desired strike-point for an indirect-fire ranged assault, a player will then make a single strike-point roll (10+ roll), regardless of the number of weapon systems being fired, for each declared strike-point. Refer to the **Strike-Point Roll Table** to determine any situation modifiers that may apply.

Range band penalties are not applied to an indirect-fire ranged assault combat roll as they are applied to the strike-point roll as a (-) situation modifier, making it harder to hit the desired impact area. Cover based situation modifiers are not used for a strike-point roll.

A successful roll indicates the ranged assault has hit the desired strike-point. A failed roll results in drift (see below).

Unless otherwise noted, a model occupying the final strike-point location is subject to a secondary combat roll with a **target point roll (6+)**.

● STRIKE-POINT ROLL TABLE

SM	Situation Modifier Description
+1/+2	SA: *Advanced Targeting Computer Rating*[1]
+1	SA: *Wizzo*
+1	Valid LoS to Strike-Point
+1	Each additional activation firing at Strike-Point
-1	Long Range Band Penalty
-2	Extreme Range Band Penalty
-2	Model State: *Suppressed*

[1] Target-Lock required.

ROLL 2D6

Strike-Point Roll: Drift

The drift roll is used to determine the final point of impact for a failed strike-point roll.

To make a drift roll, the attacking player will roll one d10 as close as possible to the original strike-point location. The "point" of the d10 is used to indicate the direction of the drift, in

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relation to the initial strike-point location, while the number rolled is the distance in inches the ranged assault.

Range band penalties are also "added" to the number of inches rolled for by the drift roll, increasing the distance an attack has missed the initial strike-point location.

Example: *An attacker is attempting an indirect-fire assault in the long range band at strike-point A. After missing the strike-point roll, the attacker has rolled 1d10 for the drift roll. The "point" of the die indicates the direction, the "6" the number of inches the attack has drifted, with an additional +1" added for the long range band. This results in a final strike-point 7" away at point B.*

Strike Point Roll: Critical Fumble

When making the strike-point roll, should an attacker make a critical fumble roll, the defending player is allowed to move the strike-point to any location on the game-board within the front firing arc of the model that made the attack.

This new strike-point is not allowed to violate the minimum range of the weapon system used and may not be farther than the maximum distance allowed by the extreme range band. The drift roll is then made based on the new location to determine the final strike-point.

SA: *Area of Effect (AoE)* and Indirect-Fire

A weapon system with the SA: *Area of Effect* has the chance to damage any target (friend or foe) caught within the effective area (in inches) as measured from the final strike-point of an indirect-fire ranged assault.

An attacking player will designate the model or desired strike-point for the indirect-fire ranged assault, making the required strike-point roll to determine the final impact point as normal.

Any model located in the AoE radius, measured in inches from the center of the final strike-point, of the weapon system(s) is subject to a secondary combat roll.

Ranged Assault and Guided Missiles

Guided missiles are special in CAV: SO as they can be part of a direct or indirect-fire ranged assault but require a model to first use the **Target-Lock Action** in order to use.

Example: *The Rach Dictator B CAV from our earlier data card example is equipped with two medium MACs, one light guided missile launcher, and one light rocket 10 launcher.*

It may fire both of the MACs as a direct-fire ranged assault provided a valid LoS exists to the target or the rockets (SA: Indirect-Fire) only as an indirect-fire assault (no LoS required). If there is an existing target-lock, it may also include the guided missile as part of either ranged assault type.

Ranged Assaults and the Move Action

A player may choose to combine the move and combat action (using both APs) in order to conduct a ranged assault at some point along the model's declared movement path.

When performing this double action, the controlling player will need to mark the desired location for their model to end its movement while placing the model in the location where the ranged assault will actually occur from. If the attacking model is damaged as a result of any defensive fire and does not have the available MV to complete its planned move, simply carry out as much of the move as possible and move the model to the new location. If the move value is lowered to a distance shorter than what has already been moved, the model is left at the current location.

Ranged Assault Sub-Types

The following sub-types of a ranged assault allow a model an alternative to the standard "point and shoot" combat action.

Ranged assault sub-types may not be combined:

Defensive Fire

A model that is the target of a ranged assault and has not yet activated during the current turn may choose to use

defensive fire, allowing it shoot back at any one attacking enemy model with a direct-fire ranged assault (0 AP) at the end of the enemy model's activation.

A player must declare which model will use defensive fire before any combat rolls are resolved, using its current damage track when conducting its own fire, even if the model has been damaged or destroyed during the current enemy activation.

Defensive fire may not be used against a target that is farther away than long range (see range bands, p. 14) and receives no (+) situation modifiers when making the combat roll. A model using defensive fire may not use the combat action again for the remainder of the current turn.

Run'N Gun

While similar to combining a combat action with the move action, a model using the run 'n gun sacrifices accuracy for more speed by combining two move actions with a single ranged assault, reducing their current MV by (-2) and any primary combat roll (-1) for EACH weapon used as part of the attack.

Exception: A model with a current MV of four or less will only reduce their MV by (-1) while weapon systems with the SA: Indirect-Fire will apply the (-) situation modifier for each weapon fired to the strike-point roll.

Salvo Fire Strike

A player may choose to use multiple weapon systems of the same type as a single massed assault, firing them in unison at the same target to increase their chance of a hit and inflicting damage. This type of ranged assault is referred to as a salvo fire strike and costs 1 AP to use.

When using a salvo fire strike, only multiples of the same weapon system type may be used for the assault. A model's remaining weapon systems may not be used when using the salvo fire strike option.

A player executing a salvo fire strike will make only one combat roll for the ranged assault, receiving a (+1) for each extra weapon system (beyond the first) used in the ranged assault.

An indirect-fire ranged assault using a salvo fire strike does not receive a multi-weapon bonus to the strike-point roll.

Example: A model making a ranged assault uses the salvo fire strike to fire four light laser bolt guns at the same target, adding a (+3) situation modifier to the combat roll.

Over-Watch

Over-watch costs 2 APs to initiate and allows a currently activated model to delay making a single direct-fire ranged assault until the later activation of an enemy model that moves into LoS.

During an enemy model's move, the player controlling the

model in over-watch can request the enemy model to hold in place and proceed with its ranged assault, immediately applying any damage. Once completed, the enemy model can continue with its current activation (if able).

A model may remain in over-watch from turn to turn, provided it makes no other action, spending 1 AP to initiate a

new ranged assault while in this mode.

Example: During model A's activation, the controlling player declares the use of over-watch, hoping to catch enemy model B moving out from behind a pile of rocks.

Later in the turn, model B uses the move action to head away from the pile of rocks and into the LoS of model A at "X". Before model B is able to finish its entire move, model A declares a ranged assault at model B, halting it in place until the combat roll is completed. If model B survives it may then complete its move, provided it has the remaining MV to do so.

Immobile Targets

A model conducting a combat action on any target that has been defined as an immobile (see model states, p. 19) will receive a (+4) to any combat roll.

SA: *Ammo/Limited Ammo*

While ammunition is not tracked during the course of a firefight, a critical fumble during a primary combat or strike-point roll using a weapon system(s) with the SA: *Ammo or Limited Ammo* may result in the weapon(s) being "out of ammo" for the remainder of the game.

Roll an additional 1d6, if the result is a "1", the weapon system(s) have run out of ammo. A weapon system(s) with the SA: *Limited Ammo* will run out of ammo on a "1" or "2" roll. Any other number is ignored and play continues.

The SA: Ammo Bin allows a model to ignore an out of ammo roll for each bin it is equipped with.

Close-Combat Assault

Most combat situations in CAV: SO are fast, brutal, and highly impersonal as combatants target each other from afar. A close-combat assault brings the enemy in close, making war much more personal.

Close-combat is not hand-to-hand combat per se (gun barrels make horrible clubs after all) but is more about the ability of a pilot or squad to outmaneuver an opponent up-close, bringing their weapons to bear at just the right moment and blasting them to bits!

Areas with confined spaces (such as building interiors and trenches) or lots of cover (thick forests or city streets) will see extensive use of close-combat assaults. Most models are not designed for this "to-the-death" style of combat, while others specifically seek out a defender to close with and overwhelm them in close quarters.

CAVs and infantry are by far the best model types to perform a close-combat assault, with CAVs' sheer size and heavy armor providing a formidable platform from which to launch a close-in attack while infantry are small and nimble making them hard to target as they look to exploit any weakness an enemy may have. The base close-combat value (CCV) of these model types reflects their ability to survive and master a close-combat assault.

Combat vehicles are at a severe disadvantage in close-combat, unable to act quickly with an enemy in such close proximity, while aircraft cannot participate in this type of attack at all—grounded aircraft are destroyed immediately if targeted by a close-combat assault.

Close-Combat Resolution

Close-combat begins with one or more activated models declare their intent to move into B2B contact with an enemy model and use the combat action to conduct a close-combat assault. Up to six attackers may choose to initiate a close-combat assault against the same defending model with one model being designated as the primary attacker and any others being referred to as support. Each supporting attacker will add a (+1) to the primary attacker's base CCV.

A single opposed roll is made for both the defending and primary attacking models, adding each model's current CCV (vs hard or soft) to their roll and any additional (+/-) situation modifiers as required. The model with the highest modified combat roll is the winner (see combat action resolution, p. 18).

Close-Combat: Break

Any model wishing to leave B2B contact after participating in a close-combat assault must use the break action first. The break action is a "tactical withdrawal" designed to minimize any additional damage while putting distance between itself and the enemy and requires 1 AP and a 10+ roll to succeed.

A model attempting to "break", after declaring their intent to do so, will use their current CCV (as applied to the enemy model from the close-combat assault) as a (+) situation modifier to the roll. The model will also receive a (+1) for each friendly model and a (-1) for each enemy model that remains in B2B contact from the earlier close-combat assault.

Example: *A defending model with a current CCV of +3 (vs SA: Hard) is trying to "break" from close-combat with two enemy CAV models (-2). Its total 10+ roll situation modifier is +1.*

A successful 10+ roll will allow the model to move away from the close-combat assault up to one-half of its current MV.

A failed roll results in the loss of the AP and the model remaining in its current location. The break action is a repeatable action, provided additional APs are available.

A model that has failed to break from its current B2B location will receive a (-1) situation modifier to any close-combat assaults for the remainder of the turn.

Combat Action Resolution

Resolving the combat action is a multi-step process that uses a single die-roll to determine if the attack "hits" and if any damage is done.

The model(s) that initiated the combat action is the attacker while the target model(s) is the defender.

Any combat actions are considered simultaneous and damage (if any) will not take effect until all combat actions have been resolved during the current squad's activation phase.

- **Step 1:** Any models wishing to use the combat action during a squad's current activation will declare their intent to do so, which model(s) they are targeting, and the type of assault being attempted.

Models conducting any ranged assaults will also declare which weapon systems are being used and any ranged assault sub-types they may want to use.

- **Step 2:** Any defenders wishing to use defensive fire will now declare their intent to do so along with the target and weapon systems they will be using.

- **Step 3:** For direct-fire ranged assaults check LoS while determining the range of the attack and any situation modifiers and/or SAs that may apply to the combat roll.

Ranged assaults using a weapon system with the SA: *Indirect-Fire* will now make any strike-point rolls that may be required.

- **Step 4A (ranged assaults only):** The attacker chooses which ranged assault to resolve first. Once an assault has begun against a particular target, all ranged assaults are resolved before proceeding to the next.

A target-point combat roll is made for each ranged assault, adding or subtracting any situation modifiers, and comparing the modified roll to the designated range band target-point number. If the result is equal to or greater, the ranged assault is a "hit". If less, the ranged assault is a miss.

Note: *A natural roll of "2" on any ranged assault combat roll is an automatic miss and a critical fumble (if applicable).*

A natural roll of "12" on any combat roll is a critical success, allowing an additional 1d6 to be rolled, adding the result to the current combat roll.

- **Step 4B (close-combat assaults only):** An attacker chooses with close-combat assault to resolve first. If more than one attacker is involved in the same close-combat assault, one model is designated as the primary attacker and all other allied models are referred to as supporting attackers.

Both the primary attacker and defending model will make an opposed roll, adding or subtracting any situation modifiers and each model's CCV to their roll. The side with the highest modified combat roll is declared the winner (a tie roll results in a draw).

Note: *A natural roll of "2" on any close-combat assault is a critical fumble, allowing an opponent to roll an additional 1d6 and adding the result to their current combat roll.*

A natural roll of "12" on any combat roll is a critical success, allowing an additional 1d6 to be rolled, adding the result to the current combat roll.

- **Step 5A (ranged assaults only):** If the combat roll was a "hit", the attacker will add the margin of success to the RAV of the weapon system that was used. This combined value is then compared to the defender's AV. If equal to or greater, refer to the **ranged assault damage table (see p. 19)** and apply the result as indicated.

A lesser value, while still a "hit", indicates the defender's armor has deflected the attack, preventing any damage.

- **Step 5B (close-combat assaults only):** The winner of the opposed combat roll will use the margin of success for the close-combat assault and refer to the **close-combat assault damage table (see p. 19)** and apply the result as indicated.

- **Step 6:** If a model is destroyed before the completion of all combat actions directed towards it are resolved, the assaults are "lost" and cannot be reassigned to another target.

- **Step 7:** Once all of an attacker's ranged assaults are complete, the defender (even if destroyed) may now resolve any defensive fire ranged assaults that were previously declared.

- **Step 8:** Any model receiving one or more damage points during the current activation will now subtract the amount of damage from its current damage track, turning the d12 damage die to display the new damage track for each model.

If a model has no remaining damage tracks, it is destroyed and removed from play. Non-infantry models will place a destroyed model counter (see p. 11) to mark its final resting place!

CAV model(s) subject to a pilot check target-point roll will now do so and any model(s) affected by one or more model states (see other combat effects, pp. 19-20) as well as any critical damage, should place a counter next to the model as a reminder.

RANGED ASSAULT DAMAGE TABLE

MoS	Result
0	One damage point to defending model
1	One damage point to defending model
2	One damage point to defending model
3	One damage point to defending model[1]
4	One damage point to defending model[1]
5	Two damage points to defending model[1]
6	Two damage points to defending model[2]
7	Two damage points to defending model[2]
8	Two damage points to defending model[2]
9	Two damage points to defending model[3]
10+	Three damage points to defending model[4]

CLOSE-COMBAT ASSAULT DAMAGE TABLE

MoS	Result
0	One damage point to both models
1	One damage point to losing model
2	One damage point to losing model
3	One damage point to losing model[1]
4	One damage point to losing model[1]
5	Two damage points to losing model[1]
6	Two damage points to losing model[2]
7	Two damage points to losing model[2]
8	Two damage points to losing model[2]
9	Three damage points to losing model[3]
10+	Three damage points to losing model[4]

[1] Pilot Check
[2] Pilot Check (-1) and model is suppressed
[3] Pilot Check (-2) and model is stunned
[4] Roll on critical damage table

CRITICAL DAMAGE TABLE

Roll	Result
2	Breeder destroyed (model is disabled)
3	Breeder damaged (-1 AP)
4	Leg/Drive system crippled (1/2 MV)
5	Leg/Drive system damaged (-1 MV)
6	Model is knock-downed and stunned
7	Model is knock-downed and suppressed
8	Model is knock-downed and stunned
9	Weapon systems damaged (-1 to any combat roll)
10	Targeting systems damaged (-2 to any combat roll)
11	Weapon systems crippled (all RAV/CCV 0/0)
12	Cockpit destroyed and pilot/crew killed

ROLL 2D6

Other Combat Action Effects

Certain situations during play may arise that affect a model, resulting in additional damage and/or other restrictions and situation modifiers that may influence the successful completion of an action(s).

Model States

As a game progresses, a model may come under the affect of one or more model states. A model state is the result of a particular action made by that model or an attack/action performed against it by another model (friendly or enemy). A model can only be affected by any individual model state once per turn; consecutive model states of the same type do not stack.

The following is a current list of the model states available and their affect on a model during play:

● Disabled: A model with the Model State: *Disabled* is unable to perform any actions for the remainder of the game and if the target of an assault, will provide a (+4) situation modifier to an attacker's combat roll.

● Immobile: Any model or terrain object with the Model State: *Immobile* will provide a (+4) situation modifier to an attacker's combat roll (direct-fire) or strike point roll

● **Knockdown:** A CAV model that fails a **pilot check** or that chooses to **go prone** receives the Model State: *Knockdown*. This state prevents a model from using the combat action and if the target of an attack, will provide a (+2) situation modifier to an attacker's combat roll.

A model must use the move action to stand-up to get back to its "feet".

● **Suppressed:** A model with the Model State: *Suppressed* may not move in a direction that takes it closer to any enemy model, not moving if no direction is available.

A model with the Model State: *Suppressed* will receive a (-2) to any die roll made by the model while affected by this state.

A suppressed model will automatically recover from this state after spending one complete activation under its affect.

● **Stunned:** A model with the Model State: *Stunned* will lose all of its action points during its next activation as well as receiving a (-2) to any die roll made by the model while affected by this state.

A stunned model will automatically recover from this state after spending one complete activation under its affect.

The Repair Action

The ability of a crew to make a quick "fix" in the heat of battle is often the difference between victory and defeat. The majority of model types in CAV: SO can use the repair action to bypass damaged systems and restore limited functionality to destroyed ones using advanced microscopic repair nanites.

To make a repair, a player will declare their intent to use the repair action during a model's activation. The repair action uses a 10+ roll to determine if the attempt is successful, adding the model's repair value from its current damage track as a (+) situation modifier to the die roll.

A natural or modified result of ten or greater indicates one damage point has been repaired to the model.

The repair action is a non-repeatable action and cannot be used by a model without a repair value.

Lingering Damage

While field repairs can improve the functionality of a damaged model during a fight, the repair action cannot be used to return a model to 100% (damage track "0") after taking damage in battle.
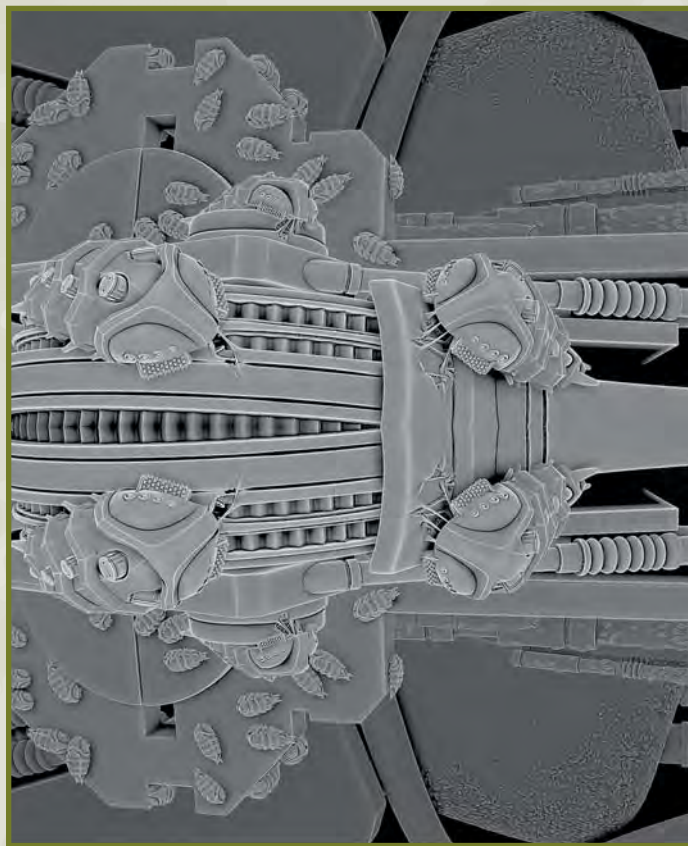
Typically, once damaged, a model will have one point of lingering damage for the remainder of the fight.

The Repair Action: Critical Success

When using the repair action, a critical success roll will allow two non-lingering damage points to be repaired.

The Repair Action: Critical Failure

When using the repair action, a critical failure roll will result

in one point of damage to the model attempting the repair.

The Special Action

The special action is a catch-all for any action granted by using a specific model type and/or a special ability or attribute.

The use of a special action will be detailed in the description of the function granting its use.

Appendix A: Weapon Systems

About this Appendix

The weapon systems appendix contains detailed descriptions of each weapon system found in the CAV: SO Quick-Start Rules. Following each description is any game rules specific (if any) to their use during play.

Guided Missile (GM)

A guided missile is a powered munition fired from a launch tube that has been targeted at a single enemy. Multiple guided missiles may be fired but each requires a separate launcher. Unlike rockets, which are mass-fired at an area in an attempt to hit any enemy machines that might be there, guided missiles require a radar lock-on before firing to have any chance of striking the desired target.

Most guided missiles use a ramjet engine for propulsion to quickly accelerate it from the launcher, away from the attacker to avoid any collateral damage, and results in a minimum travel distance the missile must go before it can arm and damage the intended target. The larger size of a single guided missile also allows for a much larger warhead than what a rocket would carry, greatly improving the damage potential of a successful strike.

- **Light Guided Missile**
  Range: *16"*
  RAV: *4/4*
  Special Attributes: *Improved Range, Limited Ammo, Minimum Range (14), Shock (4)*

Game Rules: Guided missiles can be used for both direct or indirect-fire ranged assaults but require an existing target-lock on the enemy model before firing.

Magnetic Accelerator Cannon (MAC)

The magnetic accelerator cannon is the workhorse of every major modernized fighting force in the 23rd century. The weapon uses a system of alternating negative- and positive-charged "rings" to fire an anti-armor penetrator "rod" at the desired target.

A MAC's penetrator rod is made of a hardened metal alloy (the exact composition depends on the manufacturer) encased in a super-conducting casing (known as a SABOT) that allows it to travel down the barrel of the weapon at hyper-velocity speeds. Once the rod has cleared the barrel, the SABOT falls away, allowing the round to continue on.

- **Medium Magnetic Accelerator Cannon**
  Range: *12"*
  RAV: *5/2 (+1 SA: Piercing for Dictator-B model)*
  Special Attributes: *Ammo, Blaster 1, Minimum Range (1), Strike*

Rocket (R)

Unlike missiles, rockets do not require any additional targeting assistance before being fired, relying on multiple warheads to saturate an area around a target(s) in an attempt for a successful strike. Rockets use a solid fuel propellant for acceleration, producing a winding smoke-trail behind them as they arc into the air, and burn out quicker than a missile, decreasing their overall range.

- **Light Rocket 10**
  Range: *14"*
  RAV: *3/3*
  Special Attributes: *AoE 1, Indirect-Fire, Limited Ammo, Minimum Range (12), Ravage, SMART*

Game Rules: Rockets are used with the combat action to target the area occupied by an enemy model(s).

Appendix B: Special Abilities & Attributes (SA)

About this Appendix

The special abilities & attributes appendix contains detailed descriptions of each SA found in the CAV: SO Quick-Start Rules. Following each description is any game rules specific (if any) to their use during play.

Special abilities & attributes are used in CAV: SO to help make a model more "unique" and provide a means to highlight different capabilities or equipment a specific model-type may have. A special ability or attribute will generally improve a model's performance but may also provide for a limitation or specific rule that may affect the model during play. Should the use of a SA conflict with an existing rule, use the SA description for determining the result of its use.

Advanced Target Computer

The SA: *Advanced Targeting Computer* provides for more advanced targeting systems beyond the rudimentary computers provided with most CAV models. By using the target-lock action, a model may add (+) the rating level of the SA: *Advanced Targeting Computer* to a primary combat or strike-point roll.

- **Advanced Targeting Computer 1**
  Range: *NA*

Ammo Bin

The SA: *Ammo Bin* provides for one or more internal ammo storage bins. Each ammo bin level allows a model to ignore one "out of ammo" critical fumble result as detailed by the SA: *Ammo/Limited Ammo*.

- **Ammo Bin**
  Range: *NA*

Piercing

The SA: *Piercing* will add a (+1) to any single weapon system type a model has equipped with a Hard RAV of "0+".

- **Piercing**
  Range: *NA*

Example: *The Dictator-B has two medium MACs that have been modified by SA: Piercing, increasing their hard RAV by +1*

Reinforced

A model with the SA: *Reinforced* is less susceptible to a damaging hit and will reduce any margin of success value by the rating level of the SA.

- **Reinforced**
  Range: *NA*

Note: *The SA: Reinforced cannot reduce a margin of success below "0".*

Wizzo

A model with the SA: *Wizzo* is equipped with a two-seat cockpit providing additional space for a weapon systems officer (WSO or "wizzo"), allowing the pilot to concentrate on driving/flying the machine and the WSO to control the weapon systems.

The SA: *Wizzo* provides for a (+1) to any primary combat or strike-point roll made by the model.

- **Wizzo**
  Range: *NA*

Ammo/Limited Ammo

A player making a primary combat or strike-point roll with a weapon system with the SA: *Ammo/Limited Ammo* that rolls for a critical fumble will make an additional 1d6 roll. If the result of the roll is a 1 (for ammo) or a 1-2 (for limited ammo), that weapon system has exhausted its ammo stores for the remainder of the game.

- **Ammo/Limited Ammo**
  Range: *NA*

AoE

A weapon system with the SA: *AoE* (Area of Effect) has the potential to damage any model caught within the radius of its attack. The level of the AoE determines the number of inches the radius is measured out from the final strike-point.

- **AoE**
  Range: *Special*

Blaster

A weapon system with the SA: *Blaster* has an increased chance to roll a critical success during a primary combat roll. SA: *Blaster 1* provides a critical success on a natural roll of "11+".

- **Blaster**
  Range: *NA*

Hard

A model with the SA: *Hard* is considered a hard target and is subject to any game rules that may apply to a model with this SA.

- **Hard**
  Range: *NA*

Improved Range

Weapon systems with the SA: *Improved Range* maintain their accuracy over longer ranges, reducing the target point value by (-1) on a primary combat roll when attacking a model in the long or extreme range bands.

- **Improved Range**
  Range: *NA*

Indirect-Fire

A weapon system with the SA: *Indirect-Fire* does not require a valid LoS to a target in order to be used as part of a ranged assault during the combat action.

- **Indirect-Fire**
  Range: *NA*

Minimum Range

A weapon system with the SA: *Minimum Range* cannot be used as part of a combat action to attack a target within the stated range (in inches).

- **Minimum Range**
  Range: *1"+*

Ravage

A weapon system with the SA: *Ravage* will automatically double any damage done to an infantry model located in clear/open or paved terrain types.

- **Ravage**
  Range: *NA*

Shock

A weapon system with the SA: *Shock* can hit a target with so much force that they may become disorientated and confused temporarily.

Any model targeted by a weapon system with the SA: *Shock* must immediately make a **target-point roll**, using the level of the SA as its target number. A failed roll will result in the Model State: *Suppressed* being applied to the effected model.

If the weapon system also has the SA: *AoE*, any model caught within the attack's radius will be required to make the **target-point roll** as well.

- **Shock**
    Range: *AoE*

SMART

A model with one or more weapon systems with the SA: *SMART* have the ability to adjust the RAV or AoE of the weapon system's munitions through micro-sensors integrated within the round and controlled by the model's onboard CPU.

Option A: *A player may choose to increase the AoE of a ranged attack up to 1" by subtracting from the RAV of the weapon system an equal amount. The RAV of a weapon system cannot be lowered below "0".*

Option B: *A player may choose to increase the RAV of a ranged attack up to (+1) by subtracting from the AoE of the weapon system an equal amount. The AoE of a weapon system cannot be lowered below "0".*

- **SMART**
    Range: *NA*
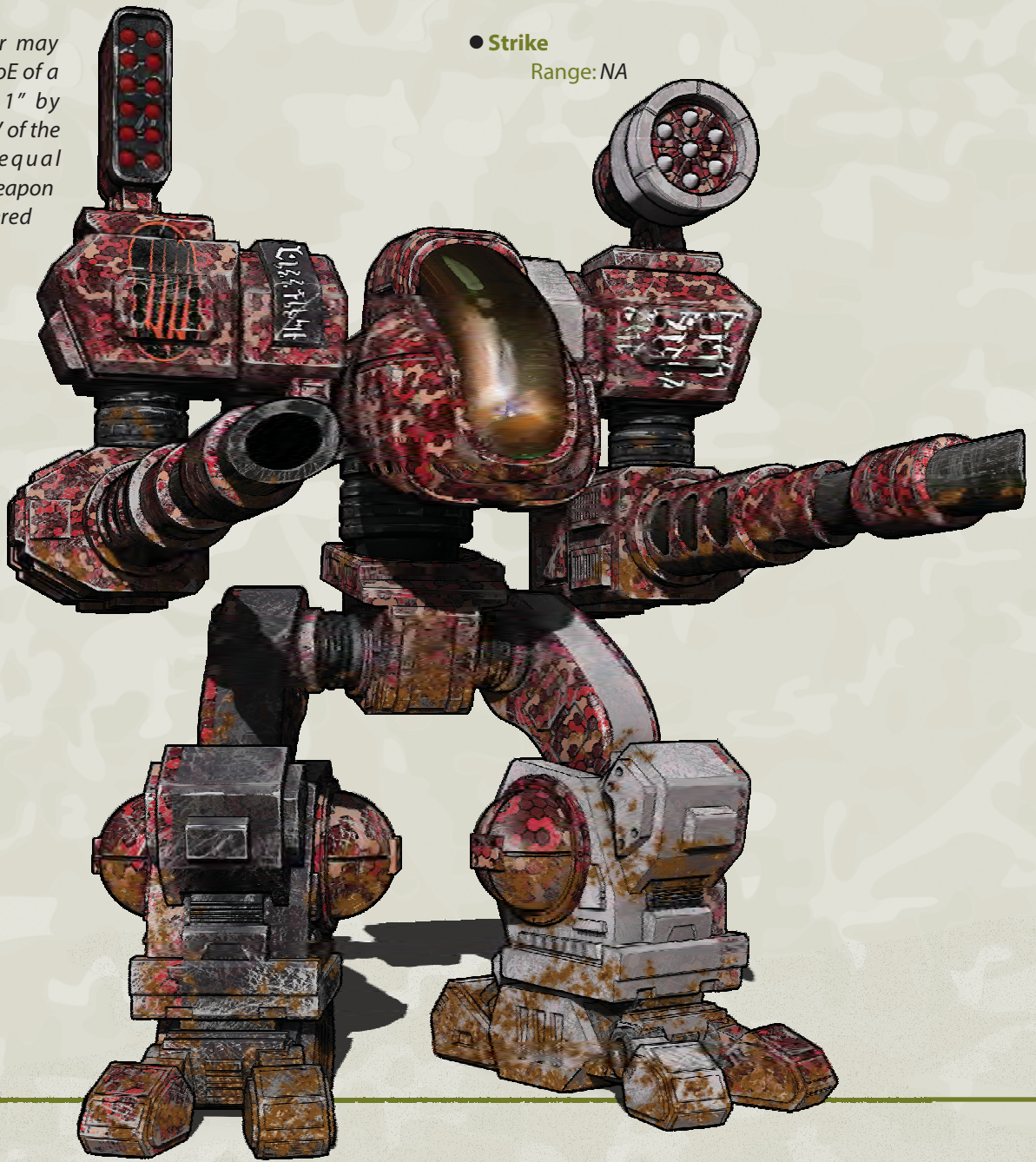
Strike

A weapon system with the SA: *Strike* is specifically designed to destroy an armored target with pin-point accuracy, making it virtually useless against dispersed infantry or fast-moving aircraft.

As a result, a weapon system with the SA: *Strike* cannot be used as part of an ranged assault against these two model types.

- **Strike**
    Range: *NA*

ACTION LIST TABLE

Free Actions
- Facing Change (p. 9)

Repeatable Actions
- Move (p. 8)
- Facing Change (p. 9)
- Break (p. 17)

Non-Repeatable Actions
- Combat (p. 12)
- Target-Lock (p. 15)
- Repair (p. 20)

RANGED ASSAULT DAMAGE TABLE

MoS	Result
0	One damage point to defending model
1	One damage point to defending model
2	One damage point to defending model
3	One damage point to defending model[1]
4	One damage point to defending model[1]
5	Two damage points to defending model[1]
6	Two damage points to defending model[2]
7	Two damage points to defending model[2]
8	Two damage points to defending model[2]
9	Two damage points to defending model[3]
10+	Three damage points to defending model[4]

TERRAIN EFFECT MODIFIER TABLE

	Movement Class
Terrain Type	**Walker**
Open	1
Road/Paved	1
Rough/Broken	2
Rubble	2
Light Woods	2
Heavy Woods	3
Swamp/Marsh	4
Water 1	2
Water 2	NA
Structure	NA
Hills	1

CLOSE-COMBAT ASSAULT DAMAGE TABLE

MoS	Result
0	One damage point to both models
1	One damage point to losing model
2	One damage point to losing model
3	One damage point to losing model[1]
4	One damage point to losing model[1]
5	Two damage points to losing model[1]
6	Two damage points to losing model[2]
7	Two damage points to losing model[2]
8	Two damage points to losing model[2]
9	Three damage points to losing model[3]
10+	Three damage points to losing model[4]

[1] Pilot Check
[2] Pilot Check (-1) and model is suppressed
[3] Pilot Check (-2) and model is stunned
[4] Roll on critical damage table

STRIKE POINT ROLL TABLE

SM	Situation Modifier Description
+1/+2	SA: *Advanced Targeting Computer Rating*[1]
+1	SA: *Wizzo*
+1	Valid LoS to Strike Point
+1	Each additional activation firing at Strike Point
-1	Long Range Band Penalty
-2	Extreme Range Band Penalty
-2	Model State: *Suppressed*

[1] Target-Lock required.

ROLL 2D6

CRITICAL DAMAGE TABLE

Roll	Result
2	Breeder destroyed (model is disabled)
3	Breeder damaged (-1 AP)
4	Leg/Drive system crippled (1/2 MV)
5	Leg/Drive system damaged (-1 MV)
6	Model is knock-downed and stunned
7	Model is knock-downed and suppressed
8	Model is knock-downed and stunned
9	Weapon systems damaged (-1 to any combat roll)
10	Targeting systems damaged (-2 to any combat roll)
11	Weapon systems crippled (all RAV/CCV 0/0)
12	Cockpit destroyed and pilot/crew killed

ROLL 2D6

## CAV: Strike Operations Quick-Start Rules:

The CAV: SO Quick-Start Rules have been designed to help you get right into the action. We have included data cards and playing pieces for the Dictator-B CAV for you to use when learning the basic concepts of the game.

Players will need to provide a playing surface as described within this rule-set and at least two six, ten, and twelve-sided dice.

Playing Pieces

It is suggested that each player should play one model each for their first game. Cut out each model and fold as indicated in the following diagram. Players should tape or glue the base of each model and it is recommended that a "penny" is taped to the bottom to provide additional weight.
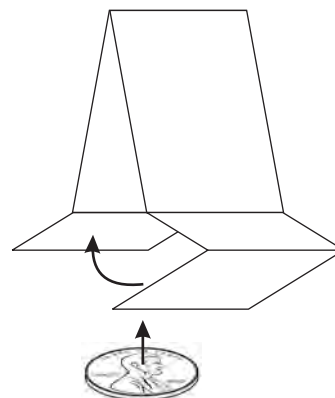
DICTATOR-B — CAV

TV: 575

[DAMAGE TRACK]

	0	1	2	3	4	5	6	7	8	9
MOVE (WALKER)	5	5	5	4	4	4	4	3	3	3
ARMOR	8	8	7	7	6	6	5	5	4	4
CLOSE-COMBAT	5/5	5/5	4/4	4/4	3/3	3/3	2/2	2/2	1/1	
DAMAGE CONTROL	-	-	4	4	3	2	1	0	-1	-2

[WEAPONS]

	0	1	2	3	4	5	6	7	8	9
MEDIUM MAC	6/2	6/2	5/2	5/2	4/1	4/1	3/1	3/1		
LIGHT GM	4/4	4/4	3/3	3/3	2/2	2/2				
LIGHT R10	3/3	3/3	3/3	2/2	2/2	2/2	2/2			

MEDIUM MAC
x2 (L/R), RNG (12), AMMO, BLASTER 1, MIN RNG (1), STRIKE

LIGHT GM
x1 (L), RNG (16), IMPROVED RANGE, LIMITED AMMO, MIN RNG (14), SHOCK (4)

LIGHT R10
x1 (R), RNG (14), AOE 1, INDIRECT-FIRE, LIMITED AMMO, MIN RNG (12), RAVAGE, SMART

[SPECIAL ABILITIES & ATTRIBUTES]

ADVANCED TARGETING COMPUTER 1, AMMO BIN 1, HARD, REINFORCED 1, WIZZO

CLASSIFIED!

| 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |

| 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 | 100 |

| OVER-WATCH | OVER-WATCH | OVER-WATCH | OVER-WATCH | OVER-WATCH | OVER-WATCH | OVER-WATCH | OVER-WATCH | OVER-WATCH | OVER-WATCH |

| BURNING | IMMOBILE | BURNING | IMMOBILE | BURNING | IMMOBILE | BURNING | IMMOBILE | BURNING | IMMOBILE |

| DISABLED | KNOCK DOWN | DISABLED | KNOCK DOWN | DISABLED | KNOCK DOWN | DISABLED | KNOCK DOWN | DISABLED | KNOCK DOWN |

| DISRUPTED | SUPPRESSED | DISRUPTED | SUPPRESSED | DISRUPTED | SUPPRESSED | DISRUPTED | SUPPRESSED | DISRUPTED | SUPPRESSED |

| HACKED! | STUNNED | HACKED! | STUNNED | HACKED! | STUNNED | HACKED! | STUNNED | HACKED! | STUNNED |

| NAP OF EARTH | NAP OF EARTH | NAP OF EARTH | NAP OF EARTH | NAP OF EARTH | NAP OF EARTH | NAP OF EARTH | NAP OF EARTH | NAP OF EARTH | NAP OF EARTH |

| DEFENSIVE FIRE | DEFENSIVE FIRE | DEFENSIVE FIRE | DEFENSIVE FIRE | DEFENSIVE FIRE | DEFENSIVE FIRE | DEFENSIVE FIRE | DEFENSIVE FIRE | DEFENSIVE FIRE | DEFENSIVE FIRE |