

Asteroid Field. Placed on the game map in accordance with certain scenarios. An asteroid field presents a hazard to any units entering the hex (see 6.6).



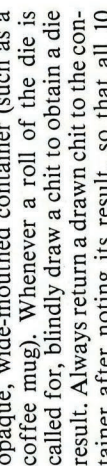
Energy Units. Used on the Energy Unit Track of each Spaceship Log to record the expenditure of the ship's Energy Units during play (see 10.3).

Prepare Jump/Jump. Placed atop a spaceship that has been issued a Prepare Jump or Jump Command (see 7.2).

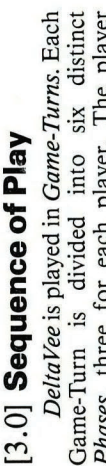


Direction Reminder. Placed adjacent to a unit that has completed a zig-zag move in the hex that the unit would enter next while maintaining its intended direction (see 6.1).

Randomizer Chits. A 20-sided die is required to play *DeltaVee*. If one is not available, these 10 chits can be placed in an opaque, wide-mouthed container (such as a coffee mug). Whenever a roll of the die is called for, blindly draw a chit to obtain a die result. Always return a drawn chit to the container after noting its result, so that all 10 chits are always available to be drawn from.



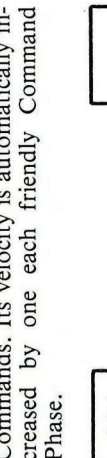
Intelligent Missile. An intelligent missile may be issued Maneuver Commands during each friendly Command Phase.



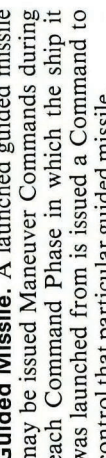
status of a launched missile is recorded on the appropriate Spaceship Log. Once a missile has been launched, a Velocity marker must be kept under it until the missile explodes or is moved off the playing area. The back of each missile counter is kept face-up until the missile is detected by the enemy player.



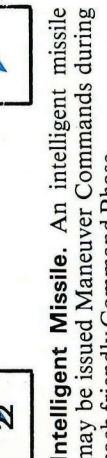
Unguided Missile. Once launched, an unguided missile may receive no Maneuver Commands. Its velocity is automatically increased by one each friendly Command Phase.



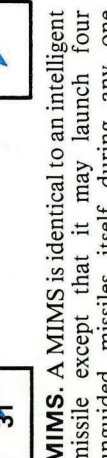
Guided Missile. A launched guided missile may be issued Maneuver Commands during each Command Phase in which the ship it was launched from is issued a Command to control that particular guided missile.



Intelligent Missile. An intelligent missile may be issued Maneuver Commands during each friendly Command Phase.



MIMS. A MIMS is identical to an intelligent missile except that it may launch four unguided missiles itself during any one friendly Fire Phase (see 9.9). After doing so, it is considered an intelligent missile.



[2.6] A Velocity marker is placed under each unit in play to show its current velocity.

SAMPLE VELOCITY MARKER



The values of the Velocity markers range from 0 to 9 and are presented in five denominations. The players place and adjust the Velocity markers under their units to show each unit's current velocity. No more than one Velocity marker is placed under a single unit at a time. A missile or spacecraft that has been *prepared* is not assigned a Velocity marker until launched. Both players may always inspect the Velocity markers under all enemy and friendly units.

[2.7] The game markers are used on the game maps and the Spaceship Logs to show the status of various units.

Planet. Placed on the game map in accordance with certain scenarios. Spaceships may sometimes land on a planet or use its gravity well to alter the ship's velocity (see 6.5).

DELTA VEE SPACESHIP LOG Nr. 1

Spaceship Name FLUTE ID A
 Velocity Rating 3 Maneuver Rating 6 Burster Class 1 Target Program -4

COMPARTMENTS

| PODS | ARMOR | | STATUS | |
|------|-------|----|--------|------|
| | ENGR | BC | H.W. | S.J. |
| 1 | 2 | 2 | 2 | 2 |
| 2 | 2 | 2 | 2 | 2 |
| 3 | 2 | 2 | 2 | 2 |
| 4 | 2 | 2 | 2 | 2 |
| 5 | 2 | 2 | 2 | 2 |
| 6 | 2 | 2 | 2 | 2 |

UNGUIDED MISSILES

| POD/# | POD/# | ENERGY UNITS |
|-------|-------|--------------|
| | | |
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GUIDED MISSILES

| POD/# | POD/# | ENERGY UNITS |
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ENERGY BLOCKS

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INTELLIGENT MISSILES

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MIMS

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BATTLECRAFT

| | ARMOR | | STATUS | |
|--------|--------|--------|--------|--|
| | BRIDGE | ENGINE | | |
| Bridge | 1 | 1 | | |
| Engine | 1 | 1 | | |

ENERGY UNIT TRACK

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

Players may photo-copy this logsheet for personal use.

quent raids on each other's shipping has lately caused such strain that each man is determined to eliminate the quasi-military fleets of his rival. The two assembled fleets meet near Beta Hydra to determine which empire will come out on top.

Each player has 175,000 Trans with which to build a fleet using the accompanying Craft and Pod Cost Chart. Each player should keep his fleet secret until the combat begins; at the end of the game players should examine each other's expenditures to make sure the opponent is more honest than the billionaire he is representing. If a player cheats, he automatically loses.

Map Deployment:
 A B C D

Player 1 (Posedy) Deployment:
 One Corco *Mu* (spaceship counter A) with ten arsenal pods, one battle communications pod and one energy pod. The ship is set up facing any direction in hex 0707 on Map A with a velocity of 5. (Note: All pods and the hull have an armor level of 2.) Also, the ship has a forcefield of 2.) One *Dagger* (counter B) with one energy pod and one crew pod. This ship enters in hex 0707 on Map A under the following condition: if at any time the energy pod on the *Mu* is damaged or has used up all its energy, the *Dagger* may be brought to refuel the ship. The *Dagger* may transfer its energy pod to the *Mu* if it is in the same hex with the other ship for one friendly Movement Phase. The *Mu* must jettison one of its pods to be able to accept the new energy pod (a destroyed pod fulfills this condition).

Player 2 (Hai-Katu) Deployment:
 Three Corco *Gamma* (spaceship counters A, B and C) each with a light weapon pod and two buffered cargo pods. Two Corco *Zetas* (counters D and E) each with a hunter pod, a light weapons pod, a crew pod, two buffered cargo pods and an energy pod. One Corco

Map Deployment:
 A B C D

Player 1 Deployment:
 Before ships are set up, the player secretly writes down one hex number on any map. When play is ready to begin, the player sets up his fleet within one hex of the hex chosen, facing in any direction and with a velocity of 1 to 4.

Player 2 Deployment:
 The second player sets up his fleet following the same directions as those for the first player.

Victory Conditions:
 The first player to destroy his opponent's fleet entirely is the winner. ■■

SCENARIO 10: The Chess Players
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[3.0] Sequence of Play
DeltaVee is played in *Game-Turns*. Each *Game-Turn* is divided into six distinct *Phases*, three for each player. The player whose *Phase* is in progress is called the *Phasing player*. All actions undertaken by the players in a *Game-Turn* must proceed strictly according to the following sequence outline:

- FIRST PLAYER MOVEMENT PHASE**
 The first player (as assigned by the scenario instructions) must move all his spaceships, spacecraft, and missiles currently in play. Each unit is moved a number of hexes equal to its current velocity in the direction the unit is pointing, in accordance with the restrictions of 6.0. If a unit is moved into a hex occupied by a planet, the Phasing player may alter the unit's velocity and/or direction (see 6.5). If a unit is moved into a hex occupied by asteroids, the Phasing player must check for possible collision (see 6.6). If a missile is moved into a hex occupied by an enemy unit, or if a friendly unit is moved into a hex occupied by an enemy missile, the *Interception Routine* must be conducted (see 9.6).
- SECOND PLAYER COMMAND PHASE**
 - Detection Segment**
 The second player flips over every unrevealed enemy unit within three hexes of each of his spaceships. Once an enemy unit is revealed, it remains revealed for the rest of the game.
 - Command Segment**
 The second player issues Commands to each of his units.

[4.0] Spaceships
GENERAL RULE:
 The 12 spaceship Classes from which the players are assigned ships in *DeltaVee* vary widely in size and quality. Each spaceship is actually a hull with one to 12 attached pods. (Note: The two *Terwillicker* ship Classes are considered spacecraft and do not carry pods.) In addition to the information listed for each spaceship Class on the Spaceship Attribute Chart, each ship possesses a sub-light engine, a bridge with navigation equipment, and living quarters for a crew necessary to keep the craft running. Four industrial concerns produce the spaceships:

Terwillicker Spaceworks, Inc. manufactures the *Terwillicker-5000*, a high-quality two-person craft; and the *Terwillicker-X* fighter, an innovative adaptation of the 5000 designed for military use.

Blades Research Institute produces military craft under long-term contract. The *Dagger*, *Sword*, and *Spear* Class ships are their most successful models.

Harmonics, Inc. specializes in finely crafted ships for government and high level corporate use. The *Piccolo*, *Flute*, and *Clarinet* represent the top of their line.

The **Corco Group** manufactures a large line of commercial vessels, often sacrificing performance for economy. The *Gamma*, *Zeta*, and *Mu* Classes are well-suited for transport

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in safe regions. The *Iota* is designed to appeal to merchants working in dangerous areas.

[5.0] Pods

GENERAL RULE:

A pod is a compartment serving a specific function that is attached to or enclosed in a spaceship. Each spaceship is assigned a variety of pods, in accordance with the scenario being played. The number of pods a ship possesses and the nature of those pods make each ship in *DeltaVee* distinct. All the major attributes of each pod are listed on the Pod Attribute Chart. Additional properties of certain pods are listed in 5.6.

CASES:

[5.1] **Hunter, light weapon, heavy weapon, and arsenal pods may fire laser and particle weapons and launch missiles.**

All four of these pods may fire laser and particle bursts and barrages (see 8.0). The number of missiles of the four types (unguided, guided, intelligent, and MIMS) each pod carries is listed on the Pod Attribute Chart. Certain missiles require a Battle Command in order to be launched (see 9.1). No other pods may be used to either fire weapons or launch missiles.

[5.2] **The number of Battle Commands a player may issue to a ship in a single Command Phase is equal to the sum of the Battle Commands provided by each eligible pod.**

The light weapon, heavy weapon, and arsenal pods each contribute one Battle Command to the ship's total. The battle communications pod contributes two Battle Commands to the ship's total. No other pods contribute Battle Commands.

[5.3] **The Civ Level of a pod may affect the functions it performs.**

The Civ Level of a pod is reduced by one if it is greater than the Civ Level of the spaceship to which it is attached. Also refer to 4.7.

[5.4] **The Targeting Program affects laser and particle fire conducted from the pod.**

See 4.8 and 8.5. The Targeting Program modifier for the battle communications pod is applied to fire from anywhere on the ship. Targeting Program modifiers in other pods apply to fire from that pod only.

[5.5] **The hunter, light weapon, and heavy weapon pods may be used to fire or launch one of its weapons or missiles during the friendly Fire Phase.**

The arsenal pod may be used to fire or launch two of its weapons or missiles during the friendly Fire Phase. The battle communications pod allows one additional fire or launch (see 5.6).

[5.6] **The following pods possess special attributes not listed on the Pod Attribute Chart:**

Battle Communications. Allows *one* extra fire from any *one* pod or burster on the spaceship during the friendly Fire Phase. The player may conduct Active Search more effectively from the pod (see 7.4). The pod's Targeting Program allows a modifier of -6 for any laser or particle fire conducted from anywhere on the ship.

Tractor Beam. Allows the player to issue Maneuver Commands to another friendly or enemy spaceship or battlecraft during his Command Phase, as if he controlled the unit. The player must issue a Battle Command to use the tractor beam. If he does so, a Civ Level 7 tractor beam may be used to issue *one* Maneuver Command to any one unit *within four hexes* of the ship with the tractor beam. A Civ Level 8 tractor beam may be used to issue *two* Maneuver Commands to any one ship *within six hexes* of the ship with the tractor beam. A tractor beam may not be used to issue Maneuver Commands to an enemy or friendly *missile*. Each Maneuver Command issued by using a tractor beam requires the expenditure of a number of Energy Units equal to *twice* the Energy Burn Rate of the target unit.

Battlecraft. Contains one *Terwillicker-5000* or one *Terwillicker-X* (as specified by the scenario) that may be launched from the spaceship. To launch a battlecraft, Battle Commands must be issued in two friendly Command Phases (see 7.4). Once a battlecraft has been launched from its pod, it is treated as any other spaceship. However, a separate Battle Log is not used; the requisite information for each battlecraft is listed on the "mother" ship's Battle Log. A battlecraft may be returned to the ship from which it was launched (only) during any Command Phase in which the two units occupy the *same* hex, have *identical velocities*, and are pointing in the *same direction*. If these requirements are met, the battlecraft may be docked in its pod by issuing a Rendezvous Command. Each battlecraft begins play with 15 Energy Units. When in its pod, a battlecraft may replace expended Energy Units by drawing from the supply of Energy Units aboard the ship; no Command is required to do so (see 10.4).

Standard Jump, Augmented Jump, and Hunter. In certain scenarios, one or both players may remove a ship with a jump pod entirely from play (which is better than being destroyed). Otherwise, a jump pod has no effect on play. See 7.2 for details. A hunter pod contains a standard jump engine.

Energy. Contains 144 additional Energy Units. A ship with an energy pod expends all the Energy Units in the pod before expending Energy Units in its hull.

[5.7] **The following pods have no effect on play except that damaging or destroying any of them on an enemy spaceship may aid a player in fulfilling his Victory Conditions.**

Luxury cabin, standard cabin, crew, advanced medical, bio-research, standard cargo, buffered cargo, living cargo, lander, survey, robot and equipment, explorer, escape/EVA. Each of these pods may have an Armor Rating ranging from 0 to 2, as specified by the scenario.

[5.8] **The Pod Attribute Chart summarizes the properties of all the pods that may be used during the game.**

See charts and tables.

tronics warfare pods are permitted, only one battlecraft pod (Terwillicker-X) is available due to a shortage of pilots, and each ship must have a jump capability. Set up first speed and direction 3, on any hex of Map A. No force fields may be activated, but battlecraft and one missile per weapon pod may be prepared.

PLAYER 2 DEPLOYMENT: Set up second, direction 9 and speed 3, on any hex of Map B. One Spear lone crew pod, one energy pod, one battle communications pod, one augmented jump pod, one tractor beam pod, two battlecraft pods (with Terwillicker-X) and one arsenal pod (Spaceship Counter A)). Two Spears (Counters B and C), each with one crew pod, one energy pod, two battle communications pods, one augmented jump pod, one battlecraft pod (with Terwillicker-X) and two arsenal pods. No force fields may be up but battlecraft and one missile per pod may be prepared. All pods are Armor Class 2.

VICTORY CONDITIONS: Sambu wins by hyperjumping from any map to the 3 o'clock of Map D or a map above or below such a map. No other jumping is permitted. Player 2 wins by preventing this. Player 2's victory is especially sweet if he can board the ship with Sambu on it (capturing him), especially if no pirate ships hyperjump. If the bridge of Sambu's ship is destroyed, Sambu is killed.

SPECIAL RULES: A person or persons (Sambu in this case) may freely and secretly move between docked friendly ships. This holds for docked ships in other scenarios. Any ship of Player 1 which is beyond active search range of the ship holding Sambu, is on a map where jumping is permitted, and has a jump capability will "turn rabbit." That means that he must issue a jump command as soon as possible, if necessary issuing first a Prepare Jump command. Exception: He need not drop his force field if it means an enemy missile will hit him unshielded. This reflects the fact that Sambu was ready to sacrifice everyone else, and they knew it and were looking out for themselves.

PLAYER NOTES: Sambu chose to outfit the Gammas each with a hunter, a battle communications, and an arsenal pod. He demonstrated his famous ingenuity by previously docking the Mu (with 2 augmented jump pods, 2 energy pods, 1 battle communications pod, 2 arsenal pods, 2 force field pods, 2 burster pods, and 1 supply transfer pod) to his Iota (with 2 augmented jump pods, 1 energy pod, 1 battle communications pod, 1 battlecraft pod, 2 force field pods, and 2 burster pods), and trying to blast straight through.

Scenario two: The Battle of Yamani

Space is generally very, very empty, with light years between stars, but this area was emptier than most. The only bodies of any consequence were a rogue planetoid, Dragor, and its moon Yamani. On Yamani the People's Socialist Alliance had set up a small base facility that was very useful to their lines of communications in their war against the Federation of Planets. It was here that the long-awaited first clash of main battle fleets occurred.

Map Deployment: A B C D

The planet Dragor is in hex D0101. Yamani is in hex B1313, moving with direction 6 and velocity 1. It maintains that velocity and a distance of 12 hexes from Dragor, changing directions at hexes D1307 (to 8), D0113 (to 10), C0507 (to 12), A0513 (to 2), B0107 (to 4), and B1313 (to 6). It maintains a constant

facing relative to Dragor, so any installation on it maintains its alignment relative to Dragor. A base on the side of Yamani farthest from Dragor is always on the side farthest from Dragor, regardless of Yamani's direction. No star is nearby and these are rather small pieces of rock, so jumping is permitted at any point over 24 hexes from Dragor.

PLAYER 1 (FP) DEPLOYMENT: One Halberd command ship with 1 command pod, 2 battle communications pods, 1 electronics warfare pod, 3 energy pods, 2 augmented jump pods, 2 level 8 tractor beam pods, 1 arsenal pod, 1 battlecraft pod (with Harmonics Fugue), 1 blaster pod, and 1 crew pod.

Two Pike carriers, each with 1 battle communications pod, 2 energy pods, 1 augmented jump pod, 1 level 8 tractor pod, 6 battlecraft pods (with Terwillicker-Y), and 1 crew pod. On their first sortie, the Y's carry 2 homing missiles and 1 intelligent missile;

Two Spear battlewagons, each with 2 battle communications pods, 1 energy pod, 1 level 8 force field pod, 1 augmented jump pod, 2 arsenal pods, and 1 crew pod;

Four Sword flak cruisers, each with 1 energy pod, 1 jump pod, 2 Blaster pods, and 1 crew pod. All pods are Armor Class 2.

Set up in the bottom 3 rows of Map C, with at least one hex between each ship. Direction must be between 0 and 2 for each ship. Velocity must be the same for all ships, and be between 1 and 3. Missiles and battlecraft may be prepared (1 per appropriate pod).

PLAYER 2 (PSA) DEPLOYMENT: One 15-pod communications base on Yamani with 1 command pod, 1 long range communications pod, 1 battle communications pod, 3 energy pods, 1 level 7 tractor pod, 1 blaster pod, 1 crew pod, 1 level 7 supply transfer pod, 2 level 7 force field pods, 1 equipment pod, 1 major repair pod, and 1 level 7 missile reload pod. One 12-pod fighter base on Yamani with 2 battle communications pods, 2 energy pods, 5 battlecraft pods with Terwillicker X-1G, 1 crew pod, and 2 equipment pods. As long as there is an undamaged equipment pod, each fighter may reload 1 guided missile each time it refuels. One Pike with 1 battle communications pod, 1 energy pod, 1 augmented jump pod, 1 hunter pod, 1 tractor pod, 2 arsenal pods, 3 battlecraft pods (with Terwillicker X-3G), 1 blaster pod, and 1 crew pod. On its first sortie, each fighter is armed with 3 guided missiles;

Two Spears, each with 1 battle communications pod, 1 energy pod, 1 standard jump pod, 1 heavy weapons pod, 2 battle craft pods (with Terwillicker X3G), 1 blaster pod, and 1 crew pod;

Four Swords, each with 1 battle communications pod, 1 standard jump pod, 2 heavy weapons pods, and 1 crew pod; One Sai guardship with 2 medium weapons pods and 1 heavy weapons pod. The Sai is in orbit around Yamani. It must remain in orbit until enemy ships are within 12 hexes. Until then it is invulnerable to unguided and guided missiles. All other PSA ships are between 2 and 6 hexes from Yamani, in adjacent hexes. They must all have a common velocity between 0 and 3 and a common direction between 6 and 9.

VICTORY CONDITIONS: The PSA Player wins if his communications base is undestroyed. If it is destroyed, the player with the highest number of undestroyed pods at the end of the battle wins. The pods of a boarded enemy ship count toward the total of the side that captured it, not the previous owner. The end of the battle is determined by mutual consent, and the battle is automatically over when only one player has units on Maps A, B, C, and D.

TABLE VI: Homing Missile Attributes

| Civilization Level | Velocity Rating | Maneuver Rating | Energy Units |
|--------------------|-----------------|-----------------|--------------|
| 6 | 1 | 5 | 8 |
| 7 | 2 | 6 | 9 |
| 8 | 2 | 7 | 10 |

Planetary Installations

These rules are intended for minor outposts on unsettled planets or moons, or defensive remnants on civilized planets whose main defenses have been destroyed. The planetary atmosphere is assumed to be light or not present.

- The rule that missiles entering a planetary hex are immediately destroyed is modified. The missile is destroyed at the end of the movement phase in which it enters the planet's hex.
- Installations can only fire and be fired at through a single hexside. Even a small asteroid can stop heavy fire.
- An installation is laid out just like a spaceship. It lacks a hull force field and burster. Its bridge and engine do not perform Maneuver Commands but help determine when an installation is completely destroyed (rule 11.0). Velocity is always 0, direction is as initialized (the installation may be partially protected by terrain).
- The installation is assumed to be relatively camouflaged. The direction of the installation is not directly revealed to the enemy player. The installation's owner announces relative velocity figures for combats, so the direction it faces is soon obvious. The pod arrangement is not revealed, although the other player knows the number of pods and the effects (missiles, battlecraft, lasers, particle fire, tractor beams, jamming, or active force field) coming from each pod.
- When the phasing player chooses a pod to inflict a hit upon, he does so without seeing the Log, choosing the pod by its number. Hits on a pod are known, and it is known when a pod is destroyed, but damage and vulnerability are not revealed.
- If an Active Search (7.4) or Detection (3.0) of the installation is conducted, roll three times on the Hit Table. Any pod "hit" is revealed. Its type and damage or vulnerability status are revealed, but not missiles or energy remaining.

Scenario one: The Flight of Sambu

After a long career, Sambu the Pirate, known to his friends and associates as Sambu the Magnificent, had gone too far. His very successful raid on the Spaceship Resupply Depot on Gameer had provided him with the best assortment of pods ever possessed by a pirate, but now the Federation fleet was bearing down on him with a vengeance. If he didn't hyper-jump fast, his fat was fried. Sambu had already equipped his fleet with his choice of pods when three Spears arrived.

Map Deployment: A B C D (E)

PLAYER 1 DEPLOYMENT: One Corco Iota (Spaceship Counter A) with Sambu aboard, one Corco Mu (Spaceship Counter B), three Corco Gamma (Spaceship Counters D, E, and F). All pods are Armor Class 2. Sambu may choose any pods for his ships within the following restrictions: No command or elec-

[6.0] Movement and Direction

GENERAL RULE:

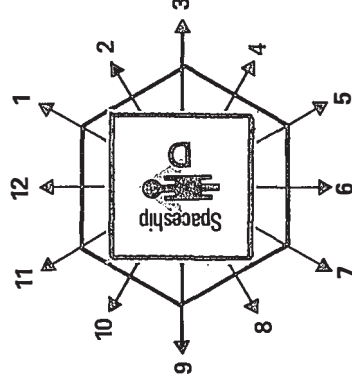
During a player's Movement Phase, he must move each and every one of his ships, battlecraft, and missiles currently in play. The number of hexes each unit must be moved is determined by its Velocity marker. The direction each unit must be moved is determined by the direction in which the unit is pointing. The player has no choice in the movement of his units during the Movement Phase (**Exception:** See 6.5).

PROCEDURE:

The player moves his units one at a time, in any order he desires. He moves each unit a number of hexes equal to its *current velocity*. Each unit is moved in a straight line, in the direction in which it is pointing. When the move is completed, the unit should point in the same direction in its destination hex.

CASES:

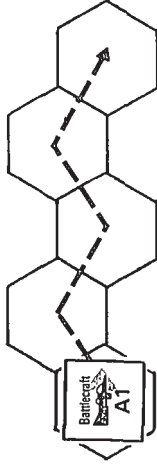
- [6.1] A unit may point in one of 12 directions.



This is shown by orienting the unit marker's arrow toward a hex side or a hex corner. These directions may be equated to the numbers on a clock face.



A unit that is pointing toward a hexside is moved along the hexrow extending from that hexside.



A unit that is pointing toward a hex corner is moved along a line extending from that corner. However, the unit is moved in a zig-zag pattern; first to the left, then to the right, then to the left, etc.

If a unit that is pointing towards a hex corner is moved an odd number of hexes, a Direction Reminder marker should be placed in the hex immediately ahead of the unit's final position in the move (i.e., in the hex the unit would occupy if the length of its move were one hex more). This reminds the players which zig-zag hexrow the unit should be moved through in its next move, so that "slippage" of the unit's direction to either

side will not occur. A Direction Reminder marker has no effect on play (except to remind the player of the unit's proper direction) and is removed when the player changes direction.

The players must make sure that the orientation of each unit is always clearly evident. When more than one unit occupies a single hex, special care must be taken to show the orientation of each unit. The direction a unit points may be changed only during the Command Phase (**Exception:** See 6.5).

- [6.2] When a ship or battlecraft is directed to move off the maps currently in use, an unused map should be placed to abut the map edge from which the unit will exit.

This may be done whenever necessary, as long as the relative positions of all units and markers in the game remains the same. When placing a new map, make sure that the hexgrid pattern is properly aligned with the other maps. A missile that is directed to move off the map is removed from play; a map is not specially positioned for it.

- [6.3] A unit with a zero Velocity marker is not moved.

A unit without a Velocity marker that is stacked with a ship (such as an unlaunched missile or battlecraft) is moved with the ship and has no effect on the ship's movement.

- [6.4] A unit may be moved into and through hexes occupied by enemy or friendly units.

The Interception Routine (see 9.6) is conducted when a missile is moved into a hex occupied by an enemy unit at any point during its move, or if any unit is moved into a hex occupied by an enemy missile at any point during its move. There is no limit to the number of units that may occupy a single hex at any given time.

- [6.5] The instant a spaceship or battlecraft is moved into a planet hex, the Phasing player may issue the unit Maneuver Commands.

The number of Maneuver Commands the unit may receive is determined as in 7.1. Such a unit may immediately receive the following Maneuver Commands only: Accelerate, Decelerate, and Direction Change, within the restrictions of 7.2. However, the unit's current velocity may not be reduced below 1 in this manner (but may be during the Command Phase). A unit expends no energy for Maneuver Commands received as a result of entering a planet hex.

If a unit's current velocity is altered upon entering a planet hex, the number of hexes the unit has already traversed in its move is subtracted from the unit's new velocity to determine the number of hexes the unit must now be moved (in its new direction, if also altered). If this number is 0 or less, the unit is moved no further (it remains in the planet hex).

A unit with a current velocity of 1 that occupies a planet hex is considered to be orbiting that planet, and need not be moved during the Movement Phase.

If the current velocity of a streamlined spaceship or battlecraft in a planet hex is

reduced to 0 during the Command Phase, the unit is considered to land on the planet during the immediately following friendly Movement Phase. When this occurs, the unit's Velocity marker is removed and the unit remains in the planet hex for the remainder of the game. The unit may not be used for any game functions but is not considered destroyed. A unit that is not streamlined may not land on a planet.

A missile is automatically destroyed upon entering a planet hex.

- [6.6] When a unit is moved into a hex occupied by asteroids, the owning player must check for collision.

When an asteroid hex is entered, the unit's movement is interrupted while the player rolls a die. If the die result is less than or equal to the current velocity of the unit, it is hit by an asteroid. The player must then use the Hit Table as if the unit had just been hit by enemy fire (see 8.7). However, if a *critical hit* result is obtained from the table, it is considered a *no effect* result.

- [6.7] No Energy Units or Energy Blocks are expended during the Movement Phase.

Energy is expended during the Command Phase and the Fire Phase.

- [6.8] Under certain conditions, a ship may conduct a hyperjump during the Movement Phase.

When a ship does so, it is immediately removed from play. See 7.2 for details.

[7.0] Commands

GENERAL RULE:

Each player issues Commands to his units during his Command Phase. A player may issue *Maneuver Commands* to all his spaceships, battlecraft, and missiles (except unguided missiles) in play. A player may issue *Battle Commands* to all his spaceships (only) that possess the requisite pods. The number of Maneuver Commands that may be issued to a unit in a single Command Phase equals the unit's Maneuver Rating minus its current velocity. The number of Battle Commands that may be issued to a spaceship in a single Command Phase equals the sum of the Battle Commands provided by the ship's eligible pods.

PROCEDURE:

The Phasing player issues Commands to each of his units individually, in any order he desires. For each unit, he calculates the number of Maneuver Commands it may receive and then issues those Commands to the unit by performing the appropriate function listed in 7.2. If the unit is a spaceship, he calculates the number of Battle Commands it may receive and issues those commands to the ship by performing the appropriate functions listed in 7.4. He then records the requisite expenditure of Energy Blocks (if the unit is a spaceship) or Energy Units (if a battlecraft or a missile).

CASES:

- [7.1] The number of Maneuver Commands issued to a unit in a single Command Phase may never exceed the unit's Maneuver Rating.

The number of Maneuver Commands a unit may receive is further reduced by its current velocity. Thus, if a unit with a Maneuver Rating of 7 had a current velocity of 4, it could only receive three Maneuver Commands. **Exception:** If a unit's current velocity equals or exceeds its Maneuver Rating, the unit may be issued *one* Decelerate or Accelerate Command *only*.

No Maneuver Command may be issued to a spaceship that possesses a Prepare Jump or Jump marker, or that has an operating force field. No Maneuver Commands may be issued to a *guided* missile unless the appropriate Battle Command is issued to the spaceship controlling the missile (see 7.4). An *unguided* missile has no Maneuver Rating and may not be issued Maneuver Commands. However, during each Command Phase, the current velocity of each of the Phasing player's unguided missiles must be increased by one.

A player is not required to issue a ship its maximum number of Maneuver Commands. However, Maneuver Commands may not be transferred from one unit to another or accumulated from Game-Turn to Game-Turn. These restrictions apply to Battle Commands as well.

[7.2] An eligible unit may be issued following Maneuver Commands:

Accelerate / Decelerate. The Velocity marker of the unit is changed for a marker one greater or less in value. Thus, if a unit with a current velocity of 3 is issued an Accelerate Command, its Velocity marker is exchanged for a 4 Velocity marker. If the unit were issued a Decelerate Command instead, it would receive a 2 Velocity marker. Assuming a unit has the requisite Maneuver Command, it may be issued any number of Accelerate or Decelerate Commands in a single Command Phase, up to a number *equal to its* Velocity Rating.

Direction Change. The direction that the unit is pointing is altered by one position (from a hexside to an adjacent hex corner, or from a hex corner to an adjacent hexside).

Assuming a unit has the requisite Maneuver Commands, it may be issued any number of Direction Change Commands in a single Command Phase.

Weave. This Command may be issued to spaceships and *battlecraft* only (not to missiles). The unit is immediately moved to any adjacent hex. The unit's velocity and direction are not changed (unless additional Maneuver Commands are issued). Only one Weave Command may be issued to a given unit in a single Command Phase. A unit may not weave into an asteroid hex or planet hex.

Prepare Jump / Abort Jump / Jump. In certain scenarios, a spaceship with a standard jump pod may prepare for a hyperjump away from the playing area. A Prepare Jump marker is placed atop the ship. In the following friendly Command Phase, the player must issue a Jump Command to the ship (the Prepare Jump marker is flipped over) or issue an Abort Jump Command to the ship (the Prepare Jump marker is removed). If a Jump Command is issued to the ship, it must be removed from play in the following friendly Movement Phase. A ship with an

augmented jump pod need not be issued a Prepare Jump Command; it requires only a Jump Command (place a Jump marker atop the ship). A Jump Command may not be issued to a ship that has an active force field (a Prepare Jump Command may be issued to such a ship).

[7.3] The number of Battle Commands issued to a spaceship may not exceed the allotment provided by its eligible pods.

A light weapon, heavy weapon, or arsenal pod each allow a ship to receive one Battle Command. A battle communications pod allows a ship to receive two Battle Commands. Thus, a spaceship with two heavy weapon pods and a battle communications pod could receive four Battle Commands in a single Command Phase. The number of Battle Commands a spaceship may receive has no effect on the number of Maneuver Commands it may receive, and vice versa.

[7.4] An eligible spaceship may be issued the following Battle Commands:

Prepare Missile. If a spaceship has a light weapon, heavy weapon, or arsenal pod, the Phasing player may prepare a missile for launch by placing the appropriate missile counter (without a Velocity marker) *face-down* atop the ship. Consult the Pod Attribute Chart to find which pods may launch missiles and which of those missiles require a Prepare Missile Command. A prepared missile may be launched in any subsequent friendly Fire Phase (see 9.4). Assuming a spaceship has the requisite Battle Commands, it may be issued any number of Prepare Missile Commands in a single Command Phase. However, the maximum number of prepared missiles that a ship may carry at one time is limited to the number of missile-carrying pods the ship possesses. Thus, a ship with two heavy weapon pods may carry no more than two prepared missiles at a time. Until a prepared missile is launched, it is moved with its ship and has no effect on play.

Control Guided Missile. The player may issue Maneuver Commands to a guided missile previously launched from the spaceship. By issuing the spaceship one such Battle Command, the player may immediately issue any number of Maneuver Commands (within the restrictions of 7.1) to one of the ship's guided missiles currently in play.

Active Search. The player may flip over every enemy unit that is currently unrevealed within six hexes of the spaceship to which he is issuing this Command. This range is counted by including the enemy unit's hex but not the searching spaceship's hex. Once a unit is flipped over, it remains revealed for the rest of the game. If the spaceship to which an Active Search Command is issued possesses a battle communications pod, every inverted enemy unit within 10 hexes is flipped over. **Note:** Active Search should not be confused with *detector*, which occurs automatically at the beginning of the Command Phase and does not require a command.

Prepare Battlecraft. If a spaceship has a battlecraft pod containing a battlecraft, the

player may prepare the battlecraft for launch by placing the appropriate battlecraft counter (without a Velocity marker) *face-down* atop the spaceship. The battlecraft remains stacked with the spaceship (and is moved with the ship) until the player issues a Launch Battlecraft Command to the ship in any subsequent friendly Command Phase.

Launch Battlecraft. The player may launch a prepared battlecraft (that is, a battlecraft placed atop a spaceship in a previous friendly Command Phase) by placing the battlecraft in any hex adjacent to the spaceship. The battlecraft must be assigned a Velocity marker equal to, one less than, or one greater than the current velocity of the spaceship. **Exception:** A battlecraft must be launched with a minimum velocity of 1. The battlecraft must be pointing in the same direction that the ship is pointing when launched, or one of the two adjacent directions on either side (thus, a battlecraft may be pointing in one of five directions when launched). Launching a battlecraft does not require the expenditure of energy from the involved spaceship or battlecraft.

Rendezvous. If a friendly spaceship or battlecraft occupies the same hex as an enemy or friendly spaceship or battlecraft, the two may be docked together. However, the two units must have identical velocities and must point in the same direction. This Command is used when a player wishes to dock a battlecraft in the ship from which it was launched (see 5.6) or when a player wishes to dock with an enemy ship to fulfill a requirement listed in a scenario. Two spaceships that are docked together use *one* Velocity marker only. During the Command Phase, the Phasing player may issue Maneuver Commands to both ships as if they were one. If the expenditure of an Energy Block is required, a number of *Energy Units* equal to the Energy Burn Rate of both spaceships combined is expended. In this way one ship may "tow" another.

Tractor Beam. If a spaceship has a tractor beam pod, the player may activate its tractor beam. The player then issues Maneuver Commands to one other spaceship or battlecraft, as explained in 5.6. A single tractor beam pod may only be issued one Command per Command Phase and does not remain active from Game-Turn to Game-Turn.

Activate / Deactivate Force Field. If a spaceship possesses a force field (Class 1 or 2), it may be activated by flipping the spaceship over to its forcefield side. When activated, the force field provides protection against enemy missiles, but not against enemy laser or particle fire. Furthermore, the only commands that may be issued to a ship with an active force field are Prepare Jump, Abort Jump, Prepare Missile, Active Search, and Prepare Battlecraft. A missile may not be launched (but laser and particle fire may be conducted) from a spaceship with an active force field. An active force field may be deactivated by flipping the ship counter back to its normal side. A player may *attempt* to activate the force field of a ship that has been intercepted by a missile at the moment of interception (see 9.8).

(continued on page 11)

are lost. Types of missiles carried vary with civilization level.

TABLE II: Number of Missiles in Reload Pods

| Level | Unguided Missile | Guided Missile | Intelligent Missile | MIMS |
|-------|------------------|----------------|---------------------|------|
| 6 | 40 | 20 | 0 | 0 |
| 7 | 25 | 20 | 10 | 5 |
| 8 | 20 | 15 | 15 | 10 |

Supply Transfer pod — A supply transfer pod allows transfer of energy and missiles between docked ships. It may be either on the provider ship or the recipient ship. The recipient ship must have the capacity to accept what is transferred: partly empty basic energy capacity and undamaged energy pods for energy, vacancies in undamaged weapons pods or undamaged missile reload pods for missiles. The providing ship must have sufficient energy or missiles to transfer, and nothing can be taken from a damaged pod. Provided missiles are not prepared.

A supply transfer pod has a number of ports, each capable of providing missiles or energy (but not both from one port on the same turn). Number of ports and rate of transfer per port varies with civilization levels. On a single "Provide Supply" Battle Command, which may be issued by a recipient or provider ship, one ship may supply one other ship (using as many ports as desired). Additional "Provide Supply" commands allow other ships to be served, although each port may only be used once per turn. A damaged supply transfer pod functions at one level lower than its original level; a destroyed pod does not function.

Table III: Supply Transfer Pod Data

| Level | Missiles/Port | Energy/Port | Ports |
|-------|-----------------------|-----------------------|-------|
| 5 | 1 | 1 unit | 1 |
| 6 | enough to fill 1 pod | 12 units | 2 |
| 7 | enough to fill 2 pods | 144 units | 3 |
| 8 | enough to fill a ship | enough to fill a ship | 4 |

Level 8 pods (only) may service fighters, but if the pod is damaged, destroyed, or made vulnerable, any fighters docked for such servicing are destroyed.

Major Repair pod — This pod is used to jettison destroyed equipment, or to move such equipment on its own ship or one docked with it between docked ships. A ship may only receive equipment if it has an appropriate empty space (with no

equipment, not destroyed equipment there). Except for pods, equipment may only be transferred between ships of the same class. Equipment may only be used after it is installed. Equipment from enemy ships requires one additional turn to transfer or install. By issuing more than one Major Repair Battle Command, repairs may be accomplished more quickly.

Table IV: Major Repair Pod Data

| Equipment Item | Turns/Jettison | Turns/Transfer | Turns/Install |
|-----------------------|----------------|----------------|---------------|
| Pods* | 1 | 1 | 1 |
| Engine | 3 | 4 | 5 |
| Bridge | 2 | 3 | 2 |
| Force Field Generator | 1 | 1 | 2 |

* — Other than Major Repair Pod itself.

The Medium Weapon pod was called the heavy weapon pod before heavier pods came along. If damaged, all missiles are lost and it retains only the capability to fire laser or particle bursts. If destroyed, it does not function and all missiles are lost.

Homing Missiles

Homing missiles act like guided missiles which have received no Control Missile Commands, until a friendly Command Phase when they are six or fewer hexes from an enemy unit which was issued Maneuver Commands in its previous command phase. Each time this occurs, the homing missile homes on that enemy unit. The phasing player issues the homing Missile Maneuver Commands as if it were a Guided Missile being provided guidance, subject to the requirement that the homing missile end the phase pointing as directly as possible at its target. This will not always be the best intercept trajectory.

If more than one enemy unit within six hexes has been issued Maneuver Commands, the target selected will be the one with the highest Relative Energy Score. The Relative Energy Score is the amount of energy expended on maneuver commands (which may be zero) minus the range. If there is a tie for the highest Relative Energy Score, the Phasing Player selects the target from those with the highest score. Homing missiles are unaffected by electronics warfare pods.

Homing missiles may be substituted for intelligent or guided missiles in a scenario. Whether homing missiles require preparation before firing is determined by whether the missile it replaces would have.

| | Unguided Missiles | Guided Missiles | Intelligent Missiles | MIMS | Battle Commands | Civ Level | Target Program | Jump | Special Rules | Number of Fires |
|-----------------------|-------------------|-------------------|----------------------|------|-----------------|-----------|----------------|------|---------------|-----------------|
| Blaster | Yes | 0 | 0 | 0 | 0 | 7 | -4 | No | No | 5 |
| Command | No | 0 | 0 | 0 | 4 | 8 | — | No | Yes | 0 |
| Force Field Generator | No | 0 | 0 | 0 | 0 | 7-8 | — | No | Yes | 0 |
| Electronics Warfare | No | 0 | 0 | 0 | 0 | 8 | — | No | Yes | 0 |
| Supply Transfer | No | 0 | 0 | 0 | 0 | 6-8 | — | No | Yes | 0 |
| Missile Reload | No | See special rules | | | 6-8 | — | | No | Yes | 0 |
| Major Repair | No | 0 | 0 | 0 | 0 | 6 | — | No | Yes | 0 |
| Medium Weapon | Yes | 8 | 6 | 0 | 1 | 6 | -1 | No | No | 1 |

design. Many have been sold to honest adventurers, but Corco developed the Epsilon with the needs of privateers foremost. Federation starfleets have had great difficulty with an owner-modified Epsilon with a maneuver rating of 9 and a target program of -6. Unconfirmed reports say the ship and pilot are so good that it can weave into an asteroid or planet hex. Not nearly so popular is the Corco Nu, famous for its large cargo capacity and for a larger appetite for energy. Few have been sold, and those only in settled areas, as they make too easy and attractive a target.

| Spaceship Type | Number of Pods | Velocity Rating | Maneuver Rating | Energy Capacity | Energy Burn Rate | Streamlined? | Burster Class | Armor Class | Force Field Class | CV Level | Target Program |
|-------------------------------------|----------------|-----------------|-----------------|-----------------|------------------|--------------|---------------|-------------|-------------------|----------|----------------|
| Terwilliker Spaceworks, Inc. | | | | | | | | | | | |
| Terwilliker 3000 (Battlecraft) | 0 | 2 | 6 | 12 | 1 | Yes | 1 | 0 | 0 | 6 | -1 |
| Terwilliker Y (Battlecraft) | 0 | 4 | 9 | 18 | 1 | Yes | 2 | 2 | 0 | 8 | -4 |
| Blades Research Institute | | | | | | | | | | | |
| Mace | 1 | 2 | 6 | 24 | 2 | Yes | 2 | 2 | 1 | 6 | 0 |
| Battleax | 6 | 1 | 4 | 120 | 12 | No | 2 | 2 | 1 | 6 | 0 |
| Poniard | 2 | 2 | 5 | 36 | 4 | Yes | 2 | 1 | 1 | 7 | -2 |
| Sai | 3 | 2 | 5 | 60 | 5 | Yes | 2 | 2 | 1 | 7 | -2 |
| Saber | 5 | 2 | 7 | 72 | 6 | No | 2 | 2 | 1 | 7 | -2 |
| Pike | 12 | 1 | 4 | 144 | 16 | No | 3 | 2 | 2 | 8 | -4 |
| Hallberd | 15 | 1 | 4 | 180 | 18 | No | 4 | 2 | 2 | 8 | -4 |
| Harmonics, Inc. | | | | | | | | | | | |
| Oboe | 3 | 2 | 6 | 60 | 5 | Yes | 1 | 1 | 0 | 6 | 0 |
| Saxophone | 10 | 2 | 5 | 144 | 11 | No | 1 | 1 | 1 | 8 | -4 |
| Fugue (Battlecraft) | 0 | 2 | 12 | 15 | 1 | Yes | 1 | 1 | 0 | 8 | -4 |
| Corco Group | | | | | | | | | | | |
| Beta | 3 | 1 | 3 | 48 | 6 | Yes | 1 | 1 | 0 | 6 | 0 |
| Theta | 8 | 1 | 2 | 120 | 12 | No | 0 | 0 | 0 | 6 | 0 |
| Nu | 15 | 1 | 3 | 192 | 24 | No | 1 | 0 | 0 | 7 | -2 |
| Epsilon | 3 | 3 | 8 | 60 | 6 | Yes | 2 | 2 | 2 | 8 | -4 |

Table 1:
Attributes of New Spaceship Types

New Pod Types

Several weapons pods are provided, plus several support pods. The support pods have little or no effect during battles, but rather are for use between battles, allowing campaign games. It is assumed that ships have on board equipment for repairing damaged equipment and armor, but that destruction is permanent. Note: When there is no battle underway, each spaceship has one additional Battle Command available because the crew can devote itself to other matters.

The new spaceship pods available are:
Blaster pod — A damaged blaster pod has only two fires. A destroyed blaster pod does not function.

Command pod — This is the headquarters and quarters for the fleet commander. It may share its Battle Commands with any friendly ship or guided missile within its ship's active search range. (Active search range does not mean that a ship has performed an active search; it is the range the ship could search to). If damaged, it has only two Battle Commands. If destroyed it does not function.

Force Field Generator pod — This pod was originally designed as a way to retrofit a forcefield generator on large merchantmen fearing pirates, and was later adopted by larger warships. A level 7 pod produces a class 1 field, a level 8 pod produces a class 2 field. The effects of damage and destruction are the same as for hull-mounted force field generators. If a ship has more than one generator, each must be issued separate activation and deactivation commands. Rule 9.8 only applies to hull-mounted generators. There is no additional benefit from having more than one force field activated. A

ship receives protection only from the highest level force field activated.

Electronics Warfare pod — The EW pod jams enemy communications. At the beginning of the enemy Command Phase, it may subtract up to four Battle Commands from those available to enemy ships within active search range of its ship. Some of those Battle Command subtractions may be applied to enemy missiles within active search range. Unguided missiles are unaffected, but other missiles have a maneuver rating one lower than turn. A guided missile so affected also requires that its owner expend an extra Battle Command to control it for each subtraction.

Intelligent and guided missiles and MIMS rolling for interception with a ship with an undamaged EW pod subtract two from the die required for interception (an A becomes an 8). Two is added to the firing program of enemy ships when they fire at a ship with an undamaged EW pod. A damaged EW pod may subtract two battle commands from enemy ships or missiles, but does not otherwise function. A destroyed EW pod does not function.

Missile Reload pod — A missile reload pod is a specially constructed cargo pod with interior buffering for its dangerous load. Normally it is designed to provide missiles to other ships, requiring a supply transfer pod. It may provide unprepared missiles to a pod on its ship on the issuing of a Provide Supply Battle Command, providing any number of missiles until the pod is full. A damaged pod does not function. When a missile reload pod with missiles remaining is destroyed, roll the die. On a "1" the ship is destroyed by a secondary explosion. Destroyed missile reload pods do not function and all missiles

PROCEDURE:

The Phasing player declares and resolves each fire one at a time. All fires conducted from one spaceship or battlecraft must be resolved before conducting fires from another spaceship or battlecraft. For each fire conducted, the Phasing player undertakes the following steps, in order.

1. Declare what type of fire is being conducted, from where the fire is coming, and which enemy spaceship, battlecraft or missile is the target of the fire. If necessary, note the expenditure of Energy Units on the appropriate Spaceship Log.

2. Determine the range in hexes from the firing unit to the target unit. Range is counted by including the target unit's hex and all hexes lying between the firing unit and the target unit, but not the firing unit's hex.

3. Determine the relative velocity of the two units, using the Relative Velocity Chart if necessary. Subtract the Targeting Program modifier of the firing unit from the relative velocity and then add the modified relative velocity to the range to determine the Target Value.

4. Refer to the Fire Results Table, cross-referencing the proper Target Value column with the row matching the type of fire declared to find the Hit Chance. Roll the die; if the die result is less than or equal to the Hit Chance, the target may have been hit. Proceed to Step 5. If the die result is greater than the Hit Chance, the fire has missed the target and this procedure is concluded.

5. Roll the die again and refer to the Hit Table to determine which part (if any) of the enemy unit has been hit. The non-phasing player must immediately apply the effects of the hit to the target unit.

CASES:

[8.1] The number and types of fires a spaceship or battlecraft may conduct in a single Fire Phase depends on the Class of its burster and the attributes of its pods.

• A Class 1 burster on a spaceship or battlecraft allows one laser burst each Fire Phase.

• A Class 2 burster on a spaceship or battlecraft allows one laser burst or one laser barrage each Fire Phase.

• A hunter, light weapon and heavy weapon pod each allow one fire of any type (or one missile launch, see 9.2) each Fire Phase.

• An arsenal pod allows two fires of any type (or one fire and one missile launch, or two missile launches) each Fire Phase.

• A battle communications pod allows one additional fire of any type (or one additional missile launch) from any of the above eligible items each Fire Phase.

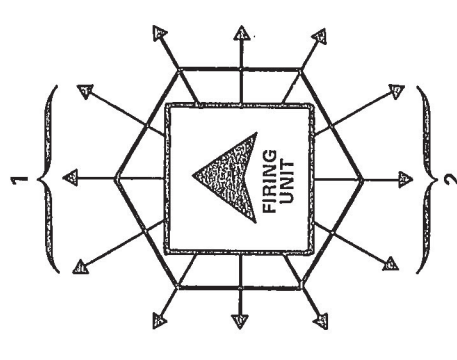
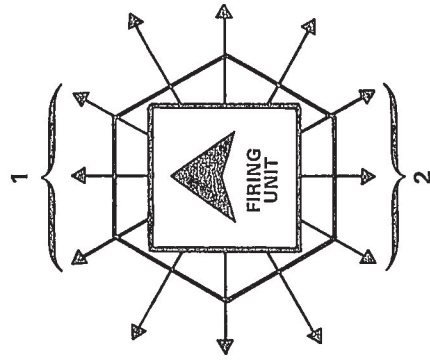
All these items are cumulative. Thus, a spaceship with two light weapon pods may be used to conduct three fires each Fire Phase (one from its burster and one from each weapon pod). If the ship also possesses a battle communications pod, it could conduct one additional fire from its burster or either weapon pod (for a total of four fires per Fire Phase).

The number of fires a spaceship may conduct in a Fire Phase should not be confused with the number of Battle Commands the ship may receive in a Command Phase. Fires may not be conducted in the Command Phase, and Commands may not be issued in the Fire Phase.

[8.2] A unit that conducts any type of fire except a laser burst must expend one or more Energy Units.

A particle burst costs 1 Energy Unit, a laser barrage costs 2 Energy Units, and a particle barrage costs 3 Energy Units. The expenditure of Energy Units is recorded on the appropriate Spaceship Log (see 10.3).

[8.3] The relative velocity of the firing unit and the target unit is determined by comparing the direction and current velocity of each unit.



Imagine the two units are in the same hex and compare their directions on one of the following diagrams. Use the first if the firing unit points toward a hexside and the second if the firing unit points toward a hex corner. The direction of the target unit is matched to one of the 12 arrows radiating from the hexes.

Depending on the unit's relative directions, one of the following statements will apply:

1. If the target unit is pointing in the same direction as the firing unit, or an adjacent direction, their relative velocity equals the difference between their current velocities.

2. If the target unit is pointing in the opposite direction as the firing unit, or a direction adjacent to the opposite direction, their relative

velocity equals the *sum* of their current velocities.

3. If the target unit is pointing in any of the six directions not covered in the above two statements, refer to the Relative Velocity Chart and cross-reference the current velocity of each unit on the chart to find their relative velocity.

Example: The firing unit has a velocity of 4 and the target unit has a velocity of 3. If their directions apply to statement 1, their relative velocity is 1. If their directions apply to statement 2, their relative velocity is 7. If their directions apply to statement 3, the Relative Velocity Chart is used to determine that their relative velocity is 5.

[8.4] **The relative velocity and the range between the firing unit and the target unit may be reduced if the positions of the two units fulfill either of the following conditions.**

1. A straight line may be drawn between the two units and their indicated directions. [See Diagram A]

If this applies, the relative velocity is determined as described in 8.3 and is then halved, rounding fractions up. The range between the two units is *not* affected.

2. The two units are pointing in the *same* direction and their current velocities are identical. [See Diagram B]

If this applies, the relative velocity is automatically zero and the range between the two units is halved, rounding fractions up. If

conditions 1 and 2 apply in a single situation, condition 2 takes precedence.

[8.5] **Each spaceship and battlecrafter possesses a Targeting Program which modifies the determined relative velocity.**

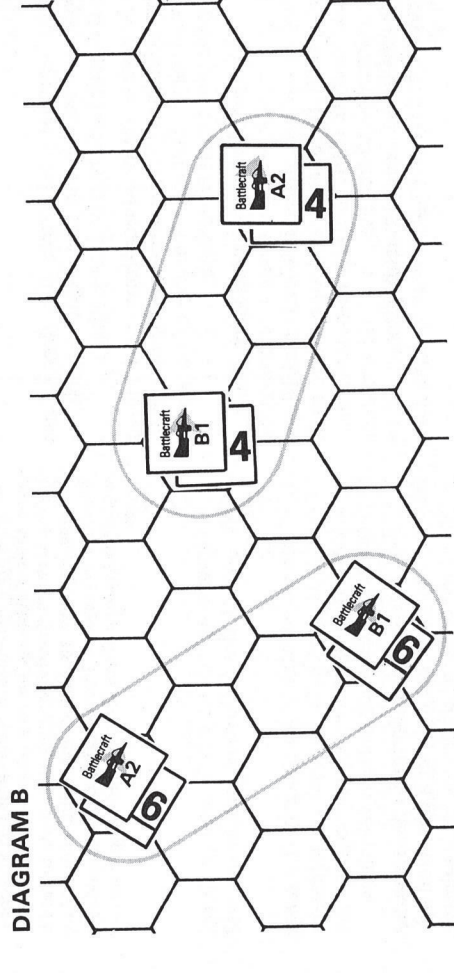
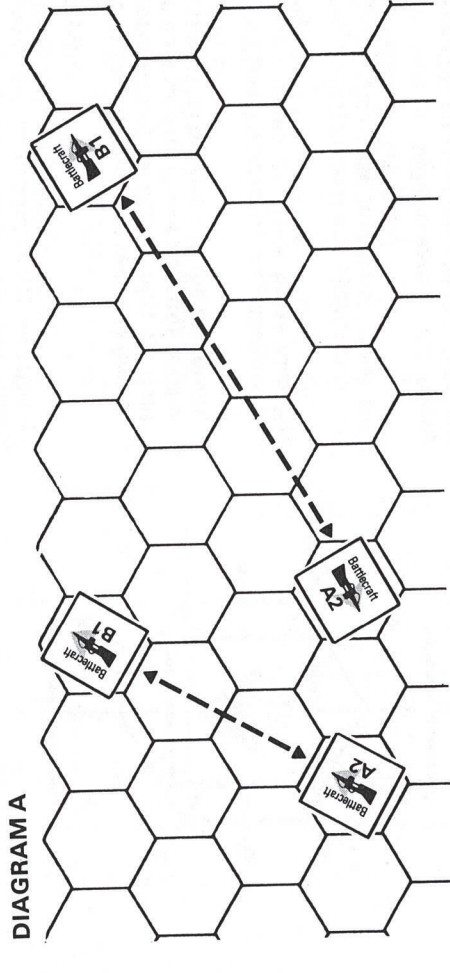
The modifier is listed on the Spaceship Attribute Chart. If a fire is being conducted from a hunter, light weapon, heavy weapon, or arsenal pod, the Phasing modifier may use the Target Program modifier of either the pod or the spaceship. If a spaceship possesses a battle communications pod, a Targeting Program modifier of -6 is applied to *all* fire conducted from the ship.

If, after applying the Targeting Program modifier, the relative velocity is less than zero, it is treated as zero. The Targeting Program modifier is *never* used to reduce the range between the firing unit and the target unit. After calculating the modified relative velocity, it is added to the range to determine the Target Value used with the Fire Results Table.

[8.6] **The Fire Results Table is used to determine if a fire has hit its target.**

The Target Value [Range + (Relative Velocity - Targeting Program)] is cross-referenced with the declared type of fire to determine the Hit Chance. The Phasing modifier then rolls the die; if the die result is equal to or less than the Hit Chance, he proceeds to the Hit Table.

[8.7] **The Hit Table is used to determine which pod or other part of the target unit has been hit.**



The Phasing player rolls the die and locates the die result on the table. With the exception of die result 1, each result lists two parts of the target unit. If the target unit possesses *neither* of the listed parts, the hit is a glancing blow that has no effect. If the target unit possesses *only one* of the listed parts, that part has been hit. If the target unit possesses *both* of the listed parts, the *Phasing* player chooses which of the two parts has been hit. He can inspect the opposing player's applicable Spaceship Log before choosing.

If a 1 is rolled when using the Hit Table, a *critical hit* has occurred; the *Phasing* player chooses one part of the target unit listed on the Hit Table to receive the hit. He can inspect the opposing player's applicable Spaceship Log before choosing. **Exception:** If the target unit is *unrevealed*, a critical hit is treated as *no hit*.

If the target unit is a *revealed missile*, it is destroyed on the result of 1 or 2. If the missile is *unrevealed*, it is destroyed on a result of 2 only. No other result on the Hit Table affects a missile.

[8.8] **When a unit receives a hit, the owning player must record it on the appropriate Spaceship Log. The effects of a hit depend on the Armor Rating of the part hit.**

• A part with a 0 Armor Rating is *destroyed* when first hit. An X is placed in the Status Box for that part on the Spaceship Log. Any further hits on that part have no additional effect.

• A part with a 1 Armor Rating is damaged when first hit. A D is placed in the Status Box for that part on the Spaceship Log. The part is destroyed when it receives a second hit.

• A part with a 2 Armor Rating is made vulnerable when first hit. A V is placed in the Status Box for that part on the Spaceship Log. The part is damaged when it receives a second hit and destroyed when it receives a third hit.

• A missile is always destroyed when first hit. Draw a line through all the boxes for that missile on the Spaceship Log and remove the missile from play.

The bridge, engine and forcefield (if any) of a spaceship are located in the main hull and are considered to have the Armor Rating of the spaceship.

[8.9] **When a pod or other part of a spaceship or battlecrafter is damaged or destroyed, the capabilities of that part are immediately impaired.**

The following list summarizes all the effects of damage and destruction.

Bridge. Damaged: The Maneuver Rating of the unit is reduced by two and the unit may no longer receive Weave Commands. **Destroyed:** The Maneuver Rating of the unit is reduced to 1 and the unit may no longer receive Weave Commands.

Engine. Damaged: Each and every Maneuver Command issued to the unit requires the expenditure of one Energy Block. **Destroyed:** The unit may receive no Maneuver Commands at all.

by Marvant Duhon

Through most of the 24th century, long range exploration ships were not as numerous as they once had been; nearly all were found at or beyond the periphery of known space.

Other spaceships only traveled between bases or kept close to a single base; the bases provided facilities for the crew, supplies, and replacement pods as needed. When a ship ventured out without a friendly base as its destination, on a military operation or pirate foray, its next move was always an immediate return to base. In the five scenarios provided with the DELTAVEE game, surviving ships are usually dangerously low on energy and missiles and badly battered. Between battles a ship might repair damaged equipment and recharge its energy, but it could not replace missiles or repair destroyed equipment.

With the gathering of warclouds, a need exists for warships capable of sustained operations, that can fight a series of battles separated by jumps with no intervening return to base. Ships designed for this "main fleet" use require a jump pod, preferably an augmented one, and all but the small Daggars should carry an energy pod and a crew pod as well. Other pods usually fall within a narrow range for each class of ships, with the main choice being whether to outfit larger ships as generalists (with a balanced load of different pod types) or specialists (with some ships bristling with arsenal pods, others outfitted as battlecrafter carriers, and so on).

For main fleet work, a Dagger's two pods are nearly always an energy pod and a hunter. If energy is available from support ships, an energy pod and a heavy weapons pod can be used; for independent scouting, the ship can carry two hunter pods. Three of the five pods of a Sword in a battle fleet should be a jump pod, a crew pod, and an energy pod. The other two could be an arsenal or heavy weapons pod and a battle communications pod. Some Swords could carry two blaster pods to provide flak defense for larger ships.

Spear (8 pod), Pike (12 pod), and Halberd (15 pod) class ships should carry a basic load of one energy pod, one crew pod, and one battle communications pod. To this can be added a couple of arsenal pods, one or two battlecrafter pods, and perhaps a tractor beam pod. This alone would fill a Spear. Larger ships could have one or more blaster pods and duplicate energy, jump, and battle communications pods. Two level 8 tractor beam pods operating upon the same ship would work wonders, but this is a costly capability. When two or four pods of the same type are carried, they should be paired (e.g., pod 1 being the same as pod 9), so that both will be affected by the same die roll on the Hit Table. This gives less choice to the enemy player scoring a hit. A fleet flagship will usually carry a command pod.

Terwillicker-X Modifications

As larger military spaceships became more common, the Terwillicker-X battlecrafter became less and less effective. Against a Spear or a heavily-armed Sword, the laser-armed fighters were merely annoying gnats. Both the X model and the earlier model 5000 had been designed for scouting and skirmishing, not fleet actions. However, it was easy to add pylons that could carry unguided or intelligent missiles. Model X-1 carried one missile beneath the hull, the X-2 had two (one on each wing), and the X-3 carried one in each of those three positions. The People's Socialist Alliance worlds employed several versions, the X-1G, X-2G, and X-3G. These had the laser removed and guided missile control equipment installed, per-

mitting a guided missile to be carried. Most other fleets considered this a poor trade-off, but the PSA used these models in droves.

Each missile carried reduces the maneuver rating by one until it is fired. No Prepare Missile Command is required. Any number of missiles carried may be fired at once, all with the same direction and velocity. A battlecrafter may not fire its burster in the Phase in which it fires a missile. The X-1G, X-2G, and X-3G may provide guidance to only one missile per Command Phase, in lieu of launching a missile in the previous Fire Phase.

Based on these developments and others, the Terwillicker-Y was built. It carries three missiles, but they are better installed so that there is no maneuverability loss. The burster is retained, and guidance can be provided to any number of its missiles per Command Phase, regardless of its actions in the previous Fire Phase. Its pod possesses 1 Battle Command, which can only be used for Commands involving a fighter.

Fighters are only missile armed on their first sortie. No reloads are carried in the pods, although projects are directed toward correcting that.

Additional Spaceship Types

The Terwillicker 3000 is an older battlecrafter which still serves in many smaller navies. The Y model, a significant improvement over the X, is found in major battlefleets. Harmonics has its own entry into the battlecrafter field, the Fugue. The Fugue is maneuverable enough to fly rings around the opposition, especially at high speeds, but it is lightly armed and armored.

The old Blades Battlecrafter is still the big cruiser in some areas. As is the case with all level 6 ships, a battle communications pod will only improve its Targeting Program to -3. The Mace was a good design for its day, quite well-armed for such a little ship. Although a single pod seems small for a warship, the Mace is found on dozens of worlds. It is used not so much as a part of a navy, but for planetary defense. The Poniard was the standard military two-pod until the vastly superior Dagger came along; it is now relegated to a few backwater areas. The Sai originally served as a leader for a squadron of Poniards. Although it is far from "top of the line," it is retained by many navies.

The Saber was the model from which the Sword developed. The Pike and Halberd are new classes, built for main battle fleets. A Burster Class of 3 means that the hull burster may fire laser bursts or barrages or particle bursts; a Class 4 means that it may use laser or particle bursts or barrages.

The old Harmonics Oboe is an small exploration ship once sent out in large numbers across the universe. The Saxophone is the current extended exploration model, designed for extensive discovery and investigation missions. It is seldom seen in civilized space.

The Corco Beta is an older model cargo ship, slightly modified and armored for use in asteroid belts. It is mainly

With the gathering of warclouds, a need exists for warships

used for in-system work these days. The Theta was big and clumsy, and is now generally unused. The Epsilon is a new

The Federation Strikes Back!



Enhancing the

DELTAVERSE™ Starship Rules

for the UNIVERSE™ Game System

Class 1 Force Field. *Damaged* or *Destroyed*: The force field may not be used at all.

Class 2 Force Field. *Damaged*: The force field is considered to have the protective ability of a Class 1 force field and may not be activated at the moment of missile interception (see 9.8). ***Destroyed*:** The force field may not be used at all.

Hunter Pod. *Damaged*: All missiles in the pod are lost, including any currently prepared for launch (cross them off the appropriate Spaceship Log); laser and particle barrages may not be conducted from the pod (laser and particle bursts may be conducted); the pod may not be used to hyperjump. ***Destroyed*:** The pod is totally eliminated.

Light Weapon or Heavy Weapon Pod. *Damaged*: All missiles in the pod are lost, including any currently prepared for launch; any guided missiles previously launched from the pod may not be issued Maneuver Commands; laser and particle barrages may not be conducted from the pod (laser and particle bursts may be conducted). ***Destroyed*:** The pod is totally eliminated.

Arsenal Pod. *Damaged*: Same as damage to a light weapon or heavy weapon pod; in addition, the pod only allows one fire per Fire Phase (instead of two). ***Destroyed*:** The pod is totally eliminated.

Battle Communications Pod. *Damaged*: The pod allows only one additional Battle Command per Command Phase (instead of two); the pod's Targeting Program modifier is eliminated (the modifier of the spaceship or firing pod being used instead); the pod does not allow an additional fire; the pod does not increase the range of an Active Search. ***Destroyed*:** The pod is totally eliminated.

Tractor Pod. *Damaged* or *Destroyed*: The tractor beam may not be used at all.

Battlecraft Pod. *Damaged* or *Destroyed*: A battlecraft may not be launched from or dock with the pod. A battlecraft inside the pod when damaged or destroyed may not be used at all.

Standard or Augmented Pod Jump. *Damaged* or *Destroyed*: The pod may not be used to hyperjump.

Energy Pod. *Damaged*: Ten Energy Units must be expended each friendly Command Phase (in addition to any other expenditures of energy) until a total of 144 Energy Units have been expended (including previously expended energy). ***Destroyed*:** The total expenditure of energy for the spaceship must be immediately brought up to 144 Energy Units; the pod is considered empty.

Damage and destruction of any other pod has no effect on play (but may affect a victory in a scenario). The capabilities of a pod or other part are not affected when made *vulnerable*.

[9.0] Missile Launch and Interception

GENERAL RULE:

During a player's Fire Phase, he may launch missiles from any of his spaceships

that possess missile-carrying pods. Certain missiles must be prepared before launch, depending on the type of missile and the pod from which it is being launched. Once launched, each missile is moved in accordance with 6.0, and is issued Commands in accordance with 7.0 and the restrictions of the following cases. The Interception Routine is undertaken each time any missile is in a hex occupied by an enemy unit. If interception occurs, the missile explodes, destroying itself and the enemy unit (unless the enemy unit is a spaceship with an active force field).

CASES:

[9.1] **The number of missiles of each type a pod possesses at the beginning of play is listed on the Pod Attribute Chart.**

The chart also states whether or not the missile must be prepared before it may be launched, by issuing a Prepare Missile Command to the spaceship in a previous Command Phase (see 7.4). In order to launch a missile, it must be atop the launching spaceship at the beginning of the friendly Fire Phase, or must be a type of missile that need not be prepared.

[9.2] **The launch of a missile counts as one fire towards the total number of fires that may be conducted from a spaceship in a single Fire Phase.**

Thus, if a spaceship with two light weapon pods launches two missiles in a Fire Phase, it may conduct only one additional fire (from its burster). Also see 8.1. The launch of a missile does not require the expenditure of energy by the missile or by the launching spaceship.

[9.3] **When the Phasing player wishes to launch a missile, he chooses a missile counter and marks his Spaceship Log.**

He chooses the counter that matches the chosen missile type and, if a guided missile, whose identity letter matches that of the spaceship from which it is being launched. He then writes the number of the pod from which it is being launched and the identity number of the missile in the first unused Pod/# box for that missile type on the appropriate Spaceship Log. For example, if guided missile A-03 were launched from a heavy weapon pod (assigned pod #2), the Phasing player would write 2/3 in the first unused Pod/# box of the guided missile section of Spaceship A's Log.

[9.4] **A missile is launched by assigning it a Velocity marker and placing it face-down in a hex adjacent to the launching spaceship.**

A missile must be assigned a Velocity marker *equal to, one greater than, or one less than* the current velocity of the spaceship from which it is launched. **Exception:** The initial velocity of a missile must be at least 1.

The hex in which a missile may be placed and the direction in which the missile may point are restricted. The following diagrams show all possible missile placements. Diagram C is used if the launching ship points toward a hexside, Diagram D is used if it points toward a hex corner. A missile may be placed in any hex shown and, within a hex,

may point in any direction indicated by an arrow radiating from the hex.

DIAGRAM C

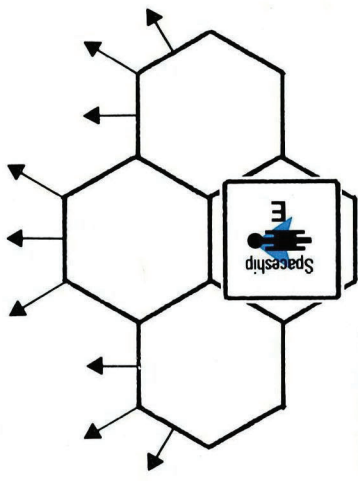
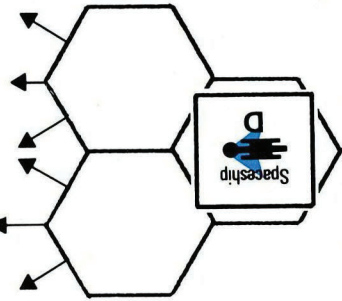


DIAGRAM D



A launched missile may not be initially placed in the hex occupied by the launching spaceship. More than one missile may be launched into the same hex. Such missiles may be assigned identical or different directions and velocities.

[9.5] **The Velocity Rating, Maneuver Rating, and Energy Unit Allowance of each type of missile are listed on the Missile Chart.**

The Civ Level of each missile is equal to the Civ Level of the pod from which it is launched. Unguided missiles may not receive Maneuver Commands and are thus not listed on the chart. Other types of missiles may be issued Maneuver Commands in accordance with 2.5 and 7.1. Note that a missile must expend one Energy Unit for each and every Maneuver Command that it receives (see 7.5). A missile must be removed from play at the conclusion of the friendly Movement Phase following the Command Phase in which it expended its last Energy Unit.

[9.6] **The Interception Routine is performed whenever a friendly missile enters a hex occupied by an enemy unit, or when any enemy unit enters a hex occupied by a friendly missile, regardless of the Phase in progress.**

The player owning the missile undertakes the following steps:

1. Determine the relative velocity of the two units as described in 8.3. The conditions of 8.4 may also apply, but the conditions of 8.5 do not. Since the range during interception will always be zero, it has no effect.
2. Cross-reference the determined relative velocity with the Civ Level of the intercepting missile on the Missile Interception Table to determine the Interception Chance.

launch once. No Command is required for a MIMS to launch its missiles, and the MIMS remains in play after doing so, as an intelligent missile.

[10.0] How to Use the Spaceship Logs

GENERAL RULE:

Before beginning play, each player fills out a Spaceship Log for each spaceship assigned to him by the scenario instructions. During the game, energy expenditure by each ship and the current status of the ship's equipment is updated on the Log. The status of the ship's missiles and battlecrafter is also kept track of on the Log.

CASES:

[10.1] The **Compartment section of the Spaceship Log is used to assign pods specific locations on the spaceship and to record hits incurred by the pods, the bridge, the engine, and the force field.** To prepare the Compartment section for play, complete the following steps:

1. If the spaceship does *not* have a force field, put an **X** in the Force Field Status box.
2. Consult the Spaceship Attribute Chart to find how many pods the spaceship possesses. Then cross out all boxes for pods beyond the number available to the ship.
3. Consult the scenario instructions to find which types of pods the ship possesses. Write the names of these pods in the available numbered Pod Type boxes. The pods may be assigned to the boxes in any order the player desires, as long as the boxes crossed out in accordance with Step 2 are not used.
4. Note the Armor Rating for the bridge, engine, and force field (that of the spaceship) and for each pod in the appropriate boxes.

During play, the Status box for the bridge, engine, force field, and each pod is used to record hits incurred, by marking a **V**, **D**, or **X** in each box (see 8.8).

[10.2] Each Missile section of the Spaceship Log is used to note how many missiles are available on the spaceship and to record the expenditure of energy by each missile after launch.

To prepare each Missile section for play, count the total number of missiles of that type available (the total of the amounts listed on the Pod Attribute Chart for the ship's missile-carrying pods). If this total is less than the total number of missiles shown in the section, cross out lines in the section (from the bottom up) until the totals match. Unless the Unguided Missile section is being filled out, consult the Missile Chart to find how many Energy Units each missile possesses (see 9.5). If this number is less than the number of Energy Unit boxes for each missile, cross out boxes for each missile (starting from the right) until the numbers match.

When a missile is prepared for launch or is launched (if preparation is not necessary), the owning player notes the number of the pod and the identity number of the missile counter in the first available Pod/# box in the

appropriate Missile section. A pod that has launched a number of missiles equal to the amount of missiles shown for the pod on the Pod Attribute Chart may launch no more missiles of that type.

Each time a missile receives a Maneuver Command, the owning player must put an **X** through one of the missile's Energy Unit boxes. When all the boxes for a missile are marked, the missile is removed from play (see 9.5). Unguided missiles do not expend Energy Units, and thus have no Energy Unit boxes.

[10.3] The Energy Unit Track and Energy Block section of the Spaceship Log is used to note how much energy the Spaceship possesses at the start of play and to record the expenditure of energy during play.

An *Energy Unit* is a measure of energy common to all units in the game. An *Energy Block* is a variable measure of energy used by spaceships only. The size of an Energy Block for a particular spaceship equals the Energy Burn Rate of the spaceship (see the Spaceship Attribute Chart) and is expressed in terms of Energy Units. Thus, an Energy Block for a *Flyer* spaceship equals six Energy Units.

To calculate the number of Energy Blocks possessed by a spaceship at the start of play, divide the Energy Capacity of the ship by its Energy Burn Rate. If the ship possesses an energy pod, add 144 to the Energy Capacity before dividing. This number is noted on the Energy Block section of the log by crossing out boxes in excess of the number (from the bottom up).

Before beginning play, cross out all the boxes on the Energy Unit Track in excess of the spaceship's Energy Burn Rate, and place an Energy Unit marker in the 0 space of the track.

Each time a spaceship expends an Energy Block during play (see 7.5) an Energy Block is marked. When all the available boxes are marked, the spaceship has no more energy (see 7.6).

Each time a spaceship expends one or more Energy Units (for conducting fire or operating a tractor beam) the Energy Unit marker is moved the appropriate number of spaces along the Energy Unit Track. Each time the marker is moved into the space matching the Energy Burn Rate of the spaceship, the marker is returned to the 0 space, and the expenditure of one Energy Block is marked. Movement of the marker is then continued (if necessary).

[10.4] The Battlecrafter section of the Spaceship Log is used to record the status of a launched battlecrafter.

The status of the battlecrafter's bridge and engine (in terms of hits received) is recorded in the Bridge and Engine boxes. The expenditure of Energy Units by the battlecrafter is recorded by marking the Energy Unit Boxes (see 7.5). When all the Energy Unit Boxes for a battlecrafter are marked, it has no more energy. A *docked* battlecrafter may receive Energy Units from its spaceship; erase marks from any number of the battlecrafter's Energy Unit Boxes and record the expenditure of an equal number of Energy Units by the ship. A battlecrafter may never possess more than 15 Energy Units.

Hit Table, roll a 10-sided die to determine which forcefield is affected on the Heavy Cruiser Forcefield Table. If one or more forcefields is destroyed on a Heavy Cruiser and a missile subsequently hits the ship, refer to the Missile Hit Chart to determine which pods are destroyed. In addition, the player must spread three additional hits over the Heavy Cruiser as per 9.8, using the accompanying Hit Table.

MISSILE HIT CHART

- #1 Destroys Engines, Bridge, and Pods 1-10.
- #2 Destroys Pods 11-20.
- #3 Destroys Pods 21-30.
- #4 Destroys Pods 31-40.

If a missile hits a Heavy Cruiser, each area not protected by an intact forcefield is destroyed. **Example:** If Forcefield #2 is destroyed, a missile hit would destroy Pods 11-20, though the other forcefields would not suffer immediate destruction. However, the player must also roll for three additional hits on the Hit Table, as per 9.8 of the *DeltaVee* rules.

HEAVY CRUISER FORCEFIELD HIT TABLE

| DIE | FORCEFIELD HIT |
|-----|----------------------------|
| 1 | 1 |
| 2 | 1 |
| 3 | 1 |
| 4 | 2 |
| 5 | 2 |
| 6 | 3 |
| 7 | 3 |
| 8 | 4 |
| 9 | 4 |
| 10 | Roll twice (circuitry hit) |

When a forcefield is hit on the Hit Table, roll a 10-sided die. The number indicates which of the four forcefields was affected. If a 10 is rolled, then massive circuitry damage has occurred; roll the die twice more to determine the two forcefields affected. If another 10 is rolled during this process, two more forcefields are affected. It is possible for a multitude of forcefields to be affected by this process. □ □

CRUISER/TRANSPORT ATTRIBUTE CHART

| ATTRIBUTES | HEAVY CRUISER | MILITARY TRANSPORT |
|-----------------------|---------------|--------------------|
| Cost | 39 | 39 |
| Number of Pods | 1 | 1 |
| Velocity Rating | 3 | 2 |
| Maneuver Rating | 288 | 264 |
| Energy Capacity | 24 | 24 |
| Energy Burn Rate | No | No |
| Streamlined | 2 | 1 |
| Burster Class | 2 | 1 |
| Armor Class | 2 | 1 |
| Forcefield Class | 2 | 1 |
| Civ Level | 8 | 7 |
| Target Program | -6 | -4 |
| Number of Forcefields | 4 | 1 |
| Storage Pod Ability* | Yes | Yes |

*A Storage Pod takes up four pods worth of space on a ship. It can store any other military ship (except another Heavy Cruiser or Transport Vehicle), which may be launched following the same procedure as launching battling aircraft. □ □

pods are able to attack as one; however, they are disadvantaged in that if one pod leader is hurt, the others also share his distress and ship's damage.

Each ship is made up of a variable number of pods. To interpret how damage applies from the Hit Table, use the following modifications: 1) if a result is rolled for a *bridge, engine, or forcefield* hit, it is considered a *miss*; and there is no effect; 2) if a result is rolled for a hit on *any of the Pods* of the ship, then *all* the Pods will suffer the same damage (thus, if the ship were composed of 4 Pods, then each Pod would take the same damage if the human player rolls a 1, 2, 3 or 4); if any other Pod number above the number actually composing the ship is rolled, it is considered a *miss* and no damage is taken (the human player does not roll the die a second time).

Each pod has the same specifications as indicated in the accompanying chart.

Pulsor

The alien culture which developed this ship has never established communications with humans. Though several of these ships have been sighted, none has ever been caught or studied thoroughly. These ships have been called the "ghosties" and "Flying Dutchmen" by humans; the few readings gathered by pilots seem to indicate that these ships are pure energy. Standing Federation Orders state that no ship will fire on these pulsors, though an occasional hot shot pilot has

does not roll the die a second time as indicated in the instruction for the Hit Table).

Other specifications for the alien ram jet are given in the accompanying chart. (Note: The ram jet has one forcefield.)

Solarship

Another slow interstellar form of travel, this alien ship uses a large, thin, reflective sail to gather the light from a star to propel it through space. It too is used primarily by alien cultures in tightly packed stellar clusters. Since travel is so slow, taking hundreds of years per transit, these cultures rely heavily on robots to handle the craft during their long trips. Only one such ship has ever entered human occupied space; the guiding robots immediately opened fire on the scout ship, forcing the crew to return fire. The ship was destroyed and its point of origin never properly established.

In combat the solarship has damage applied to it using the modifications as specified for the ram jet. Other specifications are listed in the accompanying chart.

Modular Ship

These alien vessels are really a number of individual pods which are loosely connected and which can act independently. In battle the pods break apart and act like individual ships, or they can keep bunched together as the alien commander wishes. Due to the mind link technique developed by this species, the individual

been known to let loose a few laser blasts at the strange vessels...all to no effect.

The pulsor is known to have a velocity rating and maneuver rating of 10, and the one observation of its fire power (destroying an asteroid in the ship's path) indicates that it has a burster class of at least 2. No other specifications have been determined (the ship is too atypical for the standard *DeltaVee* system).

ALIEN SPACESHIP ATTRIBUTE CHART

| ATTRIBUTES | RAM JET | SOLARSHIP | MODULAR SHIP |
|------------------|---------|-----------|--------------|
| Number of Pods | See 2 | See 2 | See 3 |
| Velocity Rating | 2 | 4 | 4 |
| Maneuver Rating | 3 | 4 | 7 |
| Energy Capacity | See 4 | See 4 | 288 |
| Energy Burn Rate | See 4 | See 4 | 12 |
| Streamlined | yes | yes | yes |
| Burster Class | 1 | 2 | 2 |
| Armor Class | 1 | 2 | 2 |
| Forcefield Class | 1 | 1 | 2 |
| Civ Level | 8 | 7 | 8 |
| Target Program | -4 | -6 | -6 |

Notes:

1. Each Pod of the Modular Ship has these specifications.
2. These ships do not have pods.
3. The Modular Ship has a variable number of pods, depending on the size of ship encountered.
4. These ships are always considered to have sufficient fuel to function throughout the length of any battle. ■ ■

SCENARIO 8: The Bomb

The terrorist organization, *Basque Revista*, has secretly manufactured a hydrogen bomb in the prison colony on Ganymede and has commandeered one transfer and one guard ship to transport the bomb to earth. They threaten to destroy the Federation headquarters unless their demands are met. Inside sources on Ganymede were able to alert the Federation in time, and now a hastily assembled fleet is being sent out to intercept the terrorists and save earth.

Map Deployment:



Note: Earth is in hex 0707 on Map E.

Player 1 (Terrorist) Deployment:

One Corco *Gamma* (spaceship counter A) with three battlecraft pods (with a *Terwillicker-X* battlecraft) and one *Piccolo* (counter B) with one buffered cargo pod. The ships are deployed facing in any direction in hex 0808 on Map A with a velocity of 3.

Player 2 (Federation) Deployment:

Two *Daggers* (spaceship counters A and B) with a heavy weapon pod and a crew pod each. On each turn after the Terrorists have fired their first shot (either particle, laser, or missile, but not a shot from the battlecraft), the Federation player rolls a 10-sided die twice. On each roll of 1, another *Dagger* (counters may have to be created) appears on hex 0707 of map E (earth) with any facing and a velocity of 0; each new *Dagger* contains an arsenal pod and an energy pod. **(Note:** Players will have to move Map A to the position of Map E when all ships have left Map A.)

Victory Conditions:

The Federation player must destroy the cargo pod on the *Piccolo* before the ship enters

into earth's orbit. The Terrorist player wins if the *Piccolo* enters earth's hex with the cargo pod intact (he does not have to land the ship in order to win).

SCENARIO 9: Firepower

Posedy, a large military contractor, has built a ship they claim can beat any other ship ever made. The Federation authorities, dubious at best over the claim, offer Posedy the chance to prove this boast by putting down the continually rebellious citizens of Hail-Katu 4.

(continued on page 22)

CRAFT AND PODS COST CHART

| SHIP TYPE | COST (IN TRANS) |
|------------------------|--------------------|
| Terwillicker-5000 | 3,100 |
| Terwillicker-X | 6,900 |
| Dagger | 12,200 |
| Sword | 22,100 |
| Spear | 27,900 |
| Piccolo | 5,400 |
| Flute | 20,700 |
| Clarinet | 14,100 |
| Corco Gamma | 6,700 |
| Corco Zeta | 6,400 |
| Corco Iota | 17,500 |
| Corco Mu | 14,500 |
| Corco Omega | 1,000 |
| PODS | |
| Arsenal | 5,000 |
| Battlecraft (pod only) | 500 |
| Communications | 3,000 |
| Heavy Weapon | 250 |
| Hunter | 3,000 |
| Light Weapon | 2,000 |
| Jump | 1,700 |
| Tractor Beam | 1,500 |
| Crew | 2,500 |
| | 100 |

HIT TABLE

| FIRST DIE | SECOND DIE | 1-2 | 3-4 | 5-6 | 7-8 | 9-10 |
|-----------|------------|------------|--------|--------|--------|--------|
| 1 | | Critical | | | | |
| 2 | | Bridge | Engine | Bridge | Engine | |
| 3 | | Forcefield | Pod 8 | Pod 16 | Pod 24 | Pod 32 |
| 4 | | Pod 1 | Pod 9 | Pod 17 | Pod 25 | Pod 33 |
| 5 | | Pod 2 | Pod 10 | Pod 18 | Pod 26 | Pod 34 |
| 6 | | Pod 3 | Pod 11 | Pod 19 | Pod 27 | Pod 35 |
| 7 | | Pod 4 | Pod 12 | Pod 20 | Pod 28 | Pod 36 |
| 8 | | Pod 5 | Pod 13 | Pod 21 | Pod 29 | Pod 37 |
| 9 | | Pod 6 | Pod 14 | Pod 22 | Pod 30 | Pod 38 |
| 10 | | Pod 7 | Pod 15 | Pod 23 | Pod 31 | Pod 39 |

When a ship is hit, roll a 10-sided die to determine which row of the Hit Table to use. Roll the die again and cross-reference the second die result with the first number rolled to find where the ship was hit. If a ship does not have sufficient pods to match the number rolled, roll the second die again until one of the pods on the ship is hit. — No effect.

Note: Players may wish to substitute this Hit Table in place of the table that appears in *DeltaVee*.

SPACESHIP LOG EXAMPLE

See page 22.

A Spaceship Log for a *Flute* with a heavy weapon pod, an energy pod, a battlecraft pod (containing a *Terwillicker-5000*) and a standard jump pod (all armor Class 2) has been filled out.

After crossing out the box for Pod 5, the player assigned the four pods to the remaining boxes in the Compartment section and noted the Armor Ratings of all the compartments. He then consulted the Pod Attribute Chart to see how many missiles the heavy weapon pod carries and crossed out four unguided missile boxes, two guided missile lines, two intelligent missile lines, and one MIMS line. The heavy weapon pod has a Civ Level of 7, which means that the guided missiles possess nine Energy Units each, the intelligent missiles possess seven Energy Units each, and the MIMS six Energy Units (as noted on the Missile Chart); so the player crossed out the rightmost columns of boxes in each Missile section to indicate these reductions.

The ship possesses 35 Energy Blocks (66 Energy Capacity plus 144 for the pod, divided by the Energy Burn Rate of 6). The player crossed out all but the top 35 boxes in the Energy Block section. Since the Energy Burn rate is 6, he crossed out the 7 and 8 spaces of the Energy Unit Track. He then placed an Energy Unit marker on the 0 space of the Track. Finally, the player noted the Armor Class of the battlecraft's bridge and engine in the Battlecraft section.

[1.1.0] Scenarios

GENERAL RULE:

Before beginning the game, the players choose which of the following five scenarios they will play. Each scenario provides a brief description of the situation, how the maps are arranged, the forces that each player receives, how those forces are set up, the deployment of planets and asteroid fields (if any), and how each player may achieve victory. Scenario 1 is recommended for those playing *DeltaVee* for the first time.

In all scenarios, a spaceship or battlecraft may be destroyed for purposes of victory. A spaceship or battlecraft is considered destroyed if it does not possess an active force field when intercepted by an enemy missile; or if its bridge, engine and more than half of its pods are destroyed (remove the unit from play). Unless specifically stated otherwise in a scenario, hyperjumping may not be conducted.

SCENARIO 1: The Showdown

A gang of cutthroats flying a long range pursuit craft stolen from a federal installation on a nearby planet are intercepted by a similar ship manned by the local guard. Enraged by the theft, the military authorities order the complete destruction of the criminals.

Map Deployment:



Player 1 Deployment: One *Piccolo* (spaceship counter E) with one hunter pod, in hex A0207 pointing towards 3 o'clock with a velocity of 1. Use Spaceship Log 1.

Player 2 Deployment: One *Piccolo* (spaceship counter D) with one hunter pod, in hex B1511 pointing towards 9 o'clock with a velocity of 1. Use Spaceship Log 1.

Victory Conditions: The instant one player's spaceship is destroyed, the opposing player is declared the winner. Neither player may conduct a jump.

SCENARIO 2: The First Shot

Tensions were high between the opposing governments of Venable and Laidley, two planets in the Eridani system. When a Venable light cruiser ventured into Laidley space to "test the waters," it encountered two Laidley patrol craft. The smaller ships opened fire and the brief Eridani War began.

Map Deployment:



Player 1 Deployment: One *Sword* (spaceship counter A) with two heavy weapon pods, one battle communications pod, one battlecraft pod (with a *Terwillicker-X*) and one energy pod; in hex A1112, pointing towards 9 o'clock with a velocity of 3. All pods are armor Class 2. Use Spaceship Log Nr. 2.

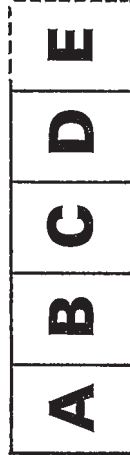
Player 2 Deployment: Two *Daggers* (counters A and B) each with a heavy weapon pod and an energy pod (armor Class 2); in hexes A0706 and A0705, pointing towards 3 o'clock with a velocity of 3. Use two copies of Spaceship Log Nr. 1.

Victory Conditions: Player 1 wins if both *Daggers* are destroyed. Player 2 wins if the *Sword* is destroyed. If neither player has fulfilled his victory conditions and all opposing spaceships and battlecraft are more than 25 hexes apart at any time, the game is declared a draw.

SCENARIO 3: Escape from Tau Ceti

As four smuggler ships head out of the Tau Ceti system with a cargo of deadly drugs and escaped convicts, a federal heavy cruiser gives chase. The naval vessel's orders are to prevent the criminal ships from hyperjumping at any cost.

Map Deployment



Player 1 Deployment:

One Corco *Iota* (spaceship counter A) with two heavy weapon pods (neither pod has any intelligent missiles or MIMS), one energy pod, one standard jump pod, one crew pod, and four buffered cargo pods. All pods are armor Class 2. Use Spaceship Log Nr. 2.

Two Corco *Gammias* (counters B and C), each with one light weapon pod, one standard jump pod, and one standard cargo pod. All pods are armor Class 1. Use two copies of Spaceship Log Nr. 1.

One Corco *Gamma* (counter D) with one standard jump pod, one crew pod, and one standard cargo pod. All pods are armor Class 0. Use Spaceship Log Nr. 1.

All four ships must be placed within one hex of A0909. All must be placed in different hexes and must point toward 3 o'clock with a velocity of 2. Each spaceship has already expended 3 Energy Blocks.

Player 2 Deployment: One *Sword* (counter A) with two arsenal pods, one battle communications pod and two battlecraft pods (each with a *Terwillicker-X*); in any hex in the 0100 hexrow of map A, pointing in any direction with a velocity of 3. All pods are armor Class 2. Use Spaceship Log Nr. 2.

Victory Conditions: Player 1 wins if the Corco *Iota* or two Corco *Gammias* are able to jump (see 7.2). A ship may not jump until it enters map E (to be placed during play as shown in the diagram) or enters a map placed above or below map E (in the direction of the arrows). Player 1 also wins if the *Sword* is destroyed. Player 2 wins if *three* enemy ships are destroyed (including the Corco *Iota*).

SCENARIO 4: Pirates!

A Corco *Mu* loaded with passengers and valuable cargo is approaching the planet Esata after hyperjumping into the system. As it nears the dense Bicker's Asteroid Belt, it is set upon by a pair of ruthless pirate ships looking for booty. A distress call is sent to Esata in the hopes that aid will come to the Corco *Mu*.

Map Deployment:



Player 1 Deployment:

One Corco *Mu* (spaceship counter B) with one light weapon pod, one battlecraft pod (with a *Terwillicker-5000*), one standard jump pod, one energy pod, one standard support pod, three standard cabin pods, one crew pod, and three buffered cargo pods; in hex C1406, pointing at 9 o'clock with a velocity of 2. All pods are armor Class 1. Use Spaceship Log Nr. 2.

One *Dagger* (spaceship counter A) with one heavy weapon pod and one energy pod (both armor Class 2); in hex A0409 pointing at 3 o'clock with a velocity of 1. Use Spaceship Log Nr. 1. The *Dagger* may not move, fire or be fired at until alerted. During each friendly Command Phase, Player 1 rolls the die; if the result is 1 or 2, the *Dagger* has been alerted and may be used normally (beginning with that Command Phase).

Player 2 Deployment:

One *Flute* (counter A) with one arsenal pod, one energy pod, one tractor pod, and one buffered cargo pod; in hex B1612, pointing in any direction with a velocity of 0. All pods are armor Class 2. Use Spaceship Log Nr. 1.

One *Flute* (counter B) with one heavy weapon pod, one battlecraft pod (with a *Terwillicker-X*), one energy pod and one buffered cargo pod; in hex B1611, pointing in any direction with a velocity of 0. All pods are armor Class 2. Use Spaceship Log Nr. 1.

Planet: In hex A0409

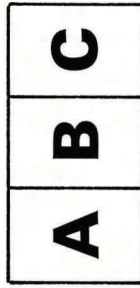
Asteroid Fields: In hexes C0902, C0904, C0907, C0909, C0912 and C0915. An asteroid field is considered to exist in all six hexes adjacent to each Asteroid Field marker, as well as in the hex occupied by each marker.

Victory Conditions: Player 1 wins the moment the Corco *Mu* is put into orbit around Esata, or if both *Flutes* are destroyed. If the Corco *Mu* is destroyed, the game is immediately declared a draw. Player 2 wins if either *Flute* is able to dock with the Corco *Mu* (see 7.4).

SCENARIO 5: Attack on Convoy Red

A vital convoy of arms and ammunition hurriedly organized by the Imperial fleet and establishment merchant heads for the planet Zaraznov, after hyperjumping from a nearby system. A successful revolutionary uprising on the planet has gained control of small well-equipped fleet. A task force from the insurgents is patrolling Zaraznov space, awaiting the expected convoy.

Map Deployment:



Player 1 Deployment:

One *Spear* (spaceship counter A) with two arsenal pods, one battle communications pod, one battlecraft pod (with a *Terwillicker-X* battlecraft), one tractor pod (Civ Level 8), one standard jump pod, one energy pod, and one crew pod. All pods are armor Class 2. Use Spaceship Log Nr. 2.

Three Corco *Zetas* (counters B, C and D) each with one light weapon pod, one energy pod, one standard jump pod, and three standard cargo pods. All pods are armor Class 1. Use three copies of Spaceship Log Nr. 1.

One *Dagger* (counter E) with a hunter pod and an energy pod. Both pods are armor Class 2. Use Spaceship Log Nr. 2.

All five ships must be placed within one hex of A0407. All must be placed in different hexes. Player 1 may choose any one direction and any one velocity (from 0 to 4) for the ships, but all must point in the same relative direction and have the same velocity. Each spaceship has already expended 10 Energy Blocks. Spaceship D has no guided missiles remaining.

Player 2 Deployment:

One *Clarinet* (counter A) with two heavy pods, one battle communications pod, two battlecraft pods (each with a *Terwillicker-X* battlecraft), one energy pod and one crew pod; in hex B0717. All pods are armor Class 2. Use Spaceship Log Nr. 2.

One *Flute* (counter B) with one heavy weapon pod, one battlecraft pod (with a *Terwillicker-X*), one energy pod and one equipment pod; in hex B0617. All pods are armor Class 2. Use Spaceship Log Nr. 1.

One *Flute* (counter C) with one light weapon pod, one tractor pod (Civ Level 8), one energy pod and one crew pod; in hex B0816. All pods are armor Class 2. Use Spaceship Log Nr. 1.

Player 2 may choose any one direction and any one velocity (from 0 to 6) for the ships, but all must point in the same relative direction and have the same velocity.

Planet: In hex C1110.

Victory Conditions:

Player 1 receives one Victory Point for each of his spaceships placed in orbit around the planet. He receives an additional VP for each undestroyed cargo pod aboard such a ship. Once a spaceship is placed in orbit, it is removed from play. When player 1 has accumulated eight VP's, he wins the game.

Player 2 receives one VP for each enemy ship destroyed and each cargo pod destroyed (thus, the destruction of a Corco *Zeta* is

Note: The *Delta Vee* counters are reproduced here to aid players in replacing lost or damaged counters

Delta Vee: The Universe Tactical Space Combat System Counter Section Nr. 1 (200 pieces): Front

Quantity of sections of this element type: 1. Total quantity of sections of this type in game: 1

| PLAYER ONE | | | | | | | | | | PLAYER TWO | | | | | | | | | | NEUTRAL MARKERS | | | | | | | | | | |
|------------|---|---|---|---|---|---|---|---|----|------------|---|---|---|---|---|---|---|---|----|-----------------|---|---|---|---|---|---|---|---|---|----|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 0 | 1 | | | | | | | | | |