THE NEW IMPROVED AND EXPANDED

ALIEN SPACE

BATTLE MANUAL

BY LOU ZOCCHI

No. 10306

EACH PLAYER CAPTAINS AN EXOTIC ALIEN STARSHIP DURING SIMULATED COMBAT. SPECIFICALLY DESIGNED AS A COMPANION GAME TO THE STAR FLEET BATTLE MANUAL.

INCLUDES RULES FOR:
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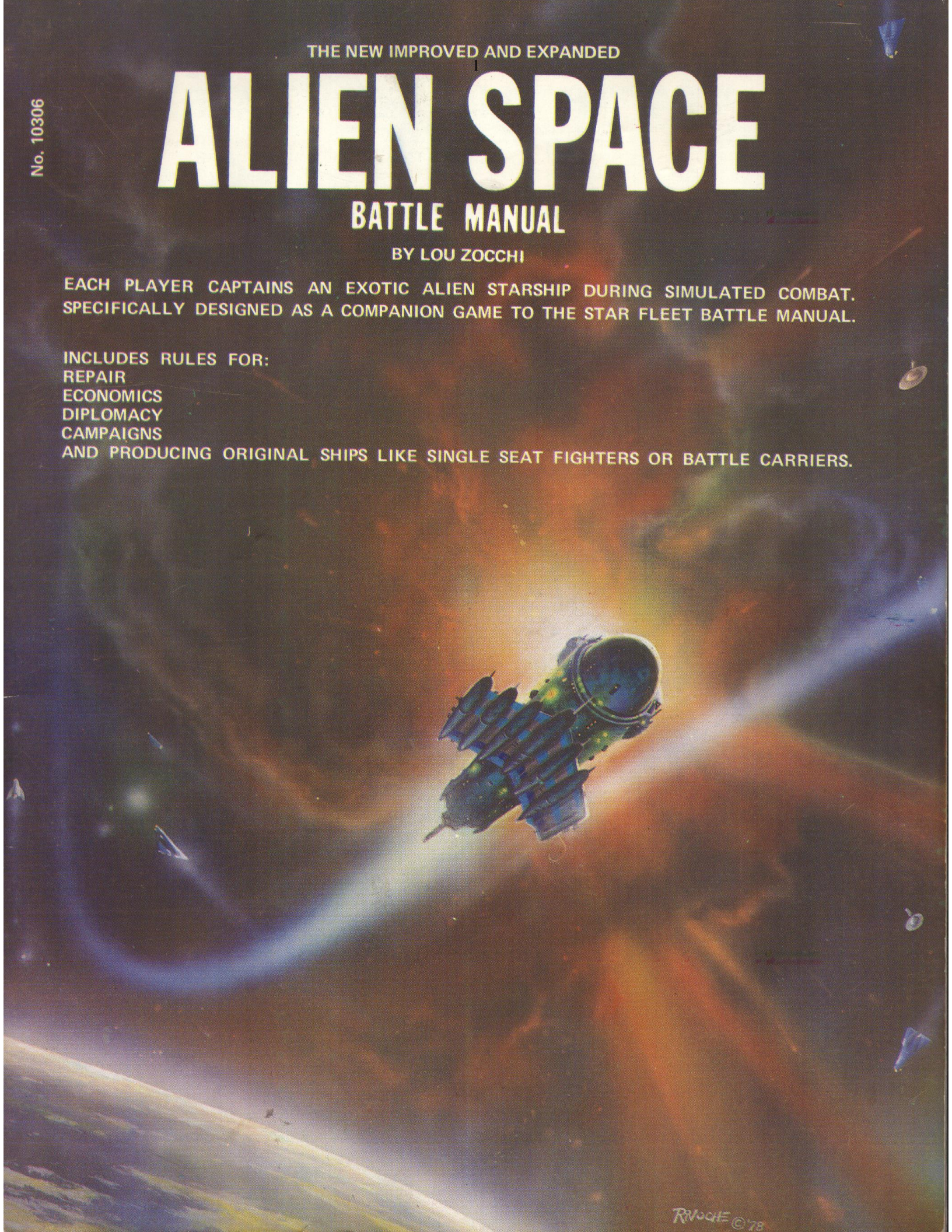

ALIEN SPACE BATTLE MANUAL

By Lou Zocchi
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INTRODUCTION

This adult intelligence game has been designed to minimize luck and maximize skill. The parts of this game which are applicable to all players are explained first. Each ship in the game has a secret weapon in addition to its main weapon. The rules for each secret weapon are written on the backside of the appropriate ship hit record. To increase your enjoyment of your first games, learn only the secret weaponry of the ship you'll captain. If your friends will also restrict their learning to the ships they command, no player will know what to expect from the other and the excitement of the unknown will closely simulate 'real life' conditions. It also gives all players the same disadvantage and challenge. Special mismatch rules at the end of these rules tell you how to preserve the challenge of the 'unknown' enemy ships.

COUNTERS

Remove the red ship counter sheet, hit records and magma template sheet from the center of this book by removing the staples gently. Cut each ship counter from the red sheet along the solid black lines so that each playing piece is a 4-inch square of red cardboard. Glue each square of cardboard to a thick piece of cardboard to increase its lifespan. Then push a needle with 6.5 feet of string or white thread on it, through the 'X' in the center of the ship drawing and knot the string on the underside so that it can't be pulled back through the counter. A few drops of hot candle wax or glue should hold the knot you tie in the thread to bottom of the playing piece. Five feet from the center of the ship tie a knot in the string. Cut the strings so that none are longer than 6 feet. Put a 7-foot string on the Rojun counter because he needs the extra foot. Put each ship hit record into it's own clear plastic document protector and write on the plastic with 'Phanto-Pencil' or 'China Riter' *[or Dry Erase marker Ed.]* or other type of wax or grease pencil. The old wax/grease will easily wipe off with a clean rag. Hit record sheets are used to show damage.

This game is played on a large table or floor. The strings in the center of each ship are used to define the angle on which you are shooting your weapons. Every ship in this game has a weakness. Your mission is to exploit his weakness while hiding your own.

HOW TO WIN

When two or three people play, the survivor is the victor. When playing team games, the side, which destroys the most enemy ships, wins. After you become familiar with this game, you can create your own conditions of victory: the player scoring the most hits, the player taking the least damage, and so on.

HIT RECORD SHEET

Every ship in this game has its own hit record sheet. These sheets show how much energy the engines produce and where that energy is spent. The sheets also show how much damage has been suffered and which portions of the ship are out of action. Please look at the Earthship hit record sheet while we explain how the sheets are used. Note the drawing of an Earthship in the upper right hand corner of the sheet. The ship counter that matches this drawing is used to portray the location of the Earthship during the game, unless the MISMATCH option (to be explained later) is used.

MAIN ENGINES

Every ship in this game has at least one main engine and one auxiliary engine. The Earthship and three others have two main engines. The main engines are the only ones that can propel ships at warp speeds (faster than light). No two ships have the same type of engine and no two engines generate the same amount of power. In addition to propelling the

ship, main engine power may be combined with auxiliary engine power to fire blazers, energize defensive shields, drive sensors and life support systems, and operate special weaponry.

Note that the Earthship can generate eight units of energy from its starboard engine and another eight units of energy from its port engine. As long as neither engine is damaged, the Earthship may generate 16 units of energy in each turn of the game. Each factor of damage inflicted upon an engine deprives it of one unit of energy output. If the Earthship were to suffer three hits on its starboard engine during this turn of play, it would generate only five units of energy from its starboard engine during the next turn of the game. Its captain would be required to draw a grease pencil line through the numbers 6-7-8 on the starboard engine to show that they are no longer functioning. Damaged engines cannot be repaired in the basic game. Unused energy cannot be stored up for later use in most cases.

AUXILIARY ENGINES

Auxiliary engines can propel the ship at the sub-light speed of one inch per turn, regardless of power output. Energy from auxiliary engines cannot be combined with energy from main engines to propel the ship at warp speeds. One unit of auxiliary power is used to move one inch and any remaining unused energy may be used for life support, sensors and so on. When a ship moving one inch per turn on auxiliary power switches to warp rive, its movement is two inches in the next turn.

MOVING

Ship counters are moved two inches for each warp, so a ship going at warp 2 would be moved 4 inches. Since each ship counter is 4 inches square, moving it one half of its own length would equal a movement of warp 1. To move a counter at warp 7, you'd move it 3½ times its own length.

If you look into the SPEED BOX on the hit record, you'll see that it costs one unit of energy to move the ship at the speed of warp 1, and two units of energy to move at warp 2. Speed must increase by only one warp per move so no ship can accelerate from warp 1 to warp 3 without first moving one turn at warp 2. To move at warp 7 costs the Earthship 13 units of energy. To move faster than warp 7 costs 14 units of energy in each turn. All ships moving warp 7 or faster must roll a die to see if their ship can withstand the stress. If a one is rolled, their ship disintegrates from overstress. If they are moving at warp 8, they must roll twice, if moving at warp 9 roll three times and so on. The energy number under the plus sign is what must be spent to move at warp 8 and beyond.

Speed decays by one warp factor per turn when no energy is used for propulsion. A ship moved at warp 6 last turn, but spending no power for propulsion this turn, would coast at warp 5 (two and one half counter lengths).

When two or more ships stop on the same spot, they are assumed to have vertical separation. A stationary or coasting ship must expend one unit of auxiliary or main engine energy to change its heading. A ship moving under power need not expend additional energy to make course changes.

No ship can change its course by more than 45° when moving faster than warp 2. Ships moving warp 1 or less can fly new courses which differ by 180° on either side of their former heading if reverse thrust is applied. Ships moving warp 1 or faster can't use auxiliary engines to reverse thrust. Reversing thrust while moving warp 2 stops the ship in place and rotates it to any new heading desired. One unit of main engine energy would have been used. Reversing thrust cuts forward velocity in half. A ship moved warp 6 last turn and reversing thrust this turn, uses main engine energy for a warp 5 move and the ship moves only one and one fourth ship counter lengths, which is one half of the normal warp 5 distance. On the next turn, it could coast at warp 2, or accelerate to warp 3. A direction change of more than 45° could not be made because starting speed was greater than warp 2. Ships moving warp 1 last turn and coasting

this turn have no movement. The maximum speed in reverse is the same as the maximum speed forward, but can only be used for slowing down. Ships always point in the direction of their movement, unless tentacled (which is explained in the Repazoid section). To change course, stretch the firing string over the new heading and hold the string to the floor at some point well clear of the ship counter. Next, rotate the ship counter until the 360 mark on its top is aligned under the shooting string. Now that the ship is pointing in the right direction, move it the proper number of ship counter lengths to equal its authorized speed.

STARTING THE GAME

All players (except the Rojun) start the game by placing their ships at equidistant points from each other and the center of the playing area. The first move must be made at warp 3 toward the center of the playing area. After the first move, players may coast, maintain or increase speed and change heading by up to 45° on either side of the first heading used. The Rojun starting procedure is explained on the backside of his hit record sheet.

BLAZERS

Most ships have a Blazer battery that is powered by Blazer generators. A shot powered by 3 Blazer generators may cause up to three units of damage and if powered by six generators, it could cause up to six units of damage. One unit of energy from either the main or auxiliary engine is needed to power each generator used. A shot powered by two Blazer generators uses two units of energy and may cause two units of damage. No Blazer battery may fire more than one shot per turn. Most Blazer batteries can fire in all directions. Blazer beams stop in the first torpedo, ship, magma template, or other item touched which is not another beam of some kind. (See weaponry cross-index on back of rules to be sure.) Since the Earthship has six Blazer generators, it could fire a strength six blast by spending six units of energy on the Blazer generators. It could not spend seven units of energy on six generators.

DEFENSIVE SHIELDS

Each ship has defensive shields, which can reduce the damage from Blazer beams, and some special weapons. If a strength three Blazer beam hits a strength two shield, one unit of damage results. A shield set at strength three or more, which is hit by a strength three or less beam, suffers no damage. One unit of energy is used to activate each unit of defensive shield, so a strength four shield uses four units of energy for each turn in which it is raised. All shields remain effective throughout that entire turn of play, regardless of how many times it is hit or breached. In the following turn, it must be powered again if it is to be used. When several Blazers hit the same shield during the same turn, they each are counted separately…unless only one ship has fired its twin blast, in which case they do count as a combined shot. The Earthship has six defensive shields. If two of them had been destroyed during an earlier turn, no more than four shield factors could be raised regardless of how much power you claimed to be cramming into it.

HITS

Everything forward of the shaded area in the center of each ship counter is the cabin area. Hits in the cabin count against either the Blazer generators, special weapon generators or the defensive shield generators. Hits falling within the shaded band count against the life support or sensor systems. Hits aft of the shaded band count against the main or auxiliary engines. The captain suffering the hit decides how much damage to log against each system in the stricken area. He does not tell which component takes the damage until the game is over. Blazer hits by the last foot of string carry one factor less power because at extreme range the beam dissipates. So a strength six shot has only strength five power beyond five feet. After all players have moved, each must estimate which anglemark of the compass circle is the one to shoot over. No test shots are allowed and no player is allowed to lay any type of object on the face of the compass or playing piece to help estimate the proper angle of fire. Each player must write

down on his hit record sheet the strength of his shields, angle of fire, and the strength and type of weaponry being fired. After all players have written their intentions, the first shooter announces his fire angle. He holds his ship to the floor while his opponent pulls the shooting string taut and moves it left or right until it is exactly centered over the fire angle announced on the compass circle around the shooting ship. The shooter is forbidden to touch the string while it is being moved towards the announced shooting anglemark. Each tic mark on the compass circle is one degree. A shot fired on the 273 heading would have the strings stretched over the third tic mark clockwise from the long 270 mark. Shots can be fired on half-degree headings by laying the string between the marks instead of over them. After the string has been stretched taut over the proper compass mark, it is examined to see if any portion of the string touches any portion of any other playing piece. If the string crosses another ship, and if the strength of the shot exceeds the strength of the shield, damage must be inflicted. A ship being hit on its port engine could not log that damage off on its starboard engine, even if the port engine were totally destroyed earlier, but he might be forced to log that damage against any surviving auxiliary engine power.

SPECIAL WEAPONS

The intention to fire special weapons is not announced until after everyone has written their angle of fire and type of weaponry used: after which the only player entitled to change his target or alter his shooting plans is the tentacled Zark victim. (Details are explained on the backside of the Zark hit record, but should not be examined now.) Players shooting special weapons always fire first but the damage they cause will not take effect until the next turn of play. The Zark ship is the only one whose special weaponry will possibly change the fire angle of his victim. See special weaponry cross-index chart on the back page to learn how various weapons interact.

When writing the angle for each shot, write all three digits, followed by a decimal point and the number 5, if shooting on half-degree marks. Each shot angle written must use at least three digits to be legal. So a shot at 4° is really written 004. A shot between 004 and 005 would be written 004.5. Nothing smaller than half degree shots can be written or attempted. Hits against allied ships count. Continuous strikes by blazers, proton torpedoes and nytron lances against a portion of the ship that is already completely destroyed causes no additional damage. Two or more ships shooting at the same target during the same turn must each record their results independently. They cannot combine their power. Damage inflicted does not influence performance until the following turn.

SENSORS

For each factor of operating sensor, a ship can ‘see’ two feet. Since most ships have four factors of sensors, most of them can see out eight feet. If weaponry was effective out to that distance, they could open fire at that range. As sensors are damaged, the range at which you are permitted to fire is reduced. Thus a ship with only three operating sensors cannot fire at targets more than six feet away. Players are not permitted to fire at ships that are beyond sensor range. Sensors require one unit of energy to operate regardless of how far out they see. The Rux can sensor out to 12 feet and the Earthship can lay proton mines even when its sensors have been totally destroyed.

LIFE SUPPORT SYSTEMS

When less than three life support systems function, the ship loses its ability to perform combinations of maneuvers because of lower crew efficiency. During one turn of play, when only one or two life support factors operate, you may perform only one of the following functions per turn: change direction, fire, reverse thrust, increase speed, or change from coasting to maintaining a speed. One turn after al life support is destroyed, the ship is dead and must be removed from the playing surface. During its last game turn without life systems, it may perform only one of the functions listed above as its dying act. No player may turn off his life system just to get one

extra unit of energy. Life support systems use only one unit of energy per turn, regardless of how many life unit factors are operating.

SEQUENCE OF EVENTS

DURING EACH TURN OF THE GAME

1. Each player circles the speed and energy used this turn in the speed block and fills out the lower portion of his hit record sheet, except for the Blazer fire angle, shield strength and power of the weapon being fired.
2. Each player moves his shooting string over the new course recorded on his hit record sheet and rotates his ship until its 360 mark is aligned with the string. All players move ships the appropriate distance circled in the speed block. All movement occurs simultaneously so that no one can benefit from waiting to see where an opponent will move. A Repazoid with a tentacled victim coasts on his old course while losing one warp per coasting turn. Repazoid victims who escaped will now move at warp 2 on any heading that is 45° on either side of his old one. The Rojun ship makes itself visible and all special weaponry templates, torpedoes, pods, mines, etc. which are enroute from a previous playing turn are now moved, exploded, etc. and any ships destroyed by them are removed from the playing surface. Proportional movement of Rux torpedoes and their targets will also be executed at this time.
3. After all movement is completed, each player records the angle at which his weapons will fire and notes how much power is being spent for weapon and shield strength. Note which weapon is being fired (special weapons or Blazers but never both.)
4. After all players say they are ready to fire, those using special weapons identify themselves and lay out their shots. The effect of their fire doesn't become evident until after all Blazers have fired. If the Repazoid successfully uses his special weapon, he asks his victim which energy source powered his Blazer shot. If the Blazer was aimed to fire at anyone other than the Repazoid, it must be re-aimed to fire at the Repazoid. If entitled to do so, it must fire.
5. Players shooting Blazers announce their angle of fire and strength of blast. Intended victims announce their shield strengths and if not strong enough to protect, help the shooter by moving his shooting string over the firing angle. If hit, the appropriate damage is recorded. The Rojun vanishes now.
6. Remove all destroyed ships from play and revert to step 1. Ships that have played for one full turn with a damaged system may attempt to repair it now. An abbreviated repeat of these steps is listed just below the ship drawing on every hit record sheet.

SAMPLE MOVE DESCRIBED

A damaged Dort with 12 energy units coming from his main engine and only four more units coming from his damaged auxiliary engine is filling out his hit record. Last turn he'd been going warp 2. He wants to move warp 3 and change course this turn. He writes his new course 330 on the hit record sheet and the number 16 in his total energy block. One unit of energy is used powering the life support system and another one is used powering the sensors. Since he wants to move warp 3, he circles this in the speed and energy block and writes the cost of warp 3 (the number 5) in the course change and warp energy block. So far, seven units of energy have been used. One for sensors, one for life support and five for propelling the ship the ship at warp 3. (Since the ship is not coasting, no additional energy is required to change course.) The Dort has only nine units of energy left for his shields and Blazer or special weaponry. He now executes step 2 of the sequence by laying out his shooting string on course 330. He rotates the ship until the 360 mark is aligned under the shooting string and the new course to be flown. All players now move their ships. Since his speed is warp 3, he moves one and one half playing counter lengths [6 inches] and stops. Next comes step 3. He decides to shoot over the 245 mark of the compass surrounding his ship drawing. He writes 245 in the fire angle column. Since the target appears to be

beyond the range of his special secret weapon, the Dort decides to fire blazers. He sends three energy units to his shields and spends the remaining six on his Blazer generators. When his hit record sheet is completely filled out for this turn, he announces that he is ready to shoot. He calls out his angle of fire and strength of shot after those firing special weapons have fired. If his shot is stronger than the shield raised in defense, the string is laid over the shooting angle to see where the shot goes. If the shot had been equal to or less powerful than the shield, there would have been no need to see where the shot went because it could do no damage. While the Dort holds his ship to the floor, he tells his opponent how to move the string so that it will be stretched tautly over the 245 mark. His opponent holds the string's furthest end and moves it as directed. If the string crossed the enemy cabin area, and his shield was set to one, he'd suffer five units of damage to either his shield system, Blazer generators or special weapon generators. The opponent logs his damage and announces his own angle of fire and strength. Now the Dort holds his opponent's shooting string and moves it as directed. If the return shot has a strength of five, and the string crosses the Dort shaded area, the Dort is required to log two factors of damage against his life support or sensor system. He could put both damage points on one of the systems, or divide it up so that each system suffers one point. Play reverts back to step 1 for the next move of the game. Eleven turns can be recorded on each sheet before it must be cleaned off to record more movements.

OPTIONAL RULES

1. Continuous practice will improve your aim to the point where you rarely miss. When this time comes, you can change the hit procedure as follows: Record the angle and strength of shots BEFORE any player moves a ship; i.e., write your fire angle while still in step 1. When you realize that all combatants are moving faster than the speed of light, it seems logical that fire must be directed to predetermined points before anyone moves. After all ships have moved, lay out the fire angles recorded on the hit sheets. TEACHERS PLEASE NOTE: When playing with this variation in classroom games, students who use geometry to plot anticipated enemy ship movements and corrective fire angels will get more hits than players trying to use intuition, eyeball or other forms of guesstimates.

2. Add altitude (vertical separation) to the game so that in addition to writing his angle and speed of movement, each player checks whether he is diving, climbing or holding his altitude. When each player writes his fire angle, he also checks the altitude movement he thinks his target made. If he checked climb and the target had marked climb on his record sheet, a hit would be scored if the shooting string also crosses the enemy ship drawing and his shot exceeds the strength of the enemy shield. If you'd expected him to hold and he climbed or dived, you'd miss your shot even though its angle was correct.

When using the altitude rule, all weapons except the tentacle beam, javelin torpedoes, proton mines, magma beam, old style nuclear device and stalker pods must specify their altitude intentions. Each of the weapons just mentioned expand equally in all directions when detonated and have limited proximity fuses which will detonate when only altitude is used to evade one of these weapons

[*Transcriber's note: In space it takes three points to describe a plane, so altitude only really comes into play when there are more than three ships involved. Up until that point, all direction changes merely show relative movement anyway. Once you have four or more ships, I think it would be more accurate to include a plus or minus altitude angle in your direction changes and use the Pythagorean theorem to keep track of relative distance above and below the arbitrary "zero level" of the floor, vertical distances, etc.*]

3. Use a combination of 1 and 2 both above or incorporate 4 below.

4. If you prefer luck, roll a die to see if hits are scored after your string has crossed the enemy ship drawing. A 1-2-3 is a miss, while 4-5-6 is a hit. The number rolled to score a hit can be changed to suit your conception of playability and could also be used as a handicap factor. Experienced players would need to roll a 5 or 6 to score damage, but novice players can score damage with 3-4-5-6 on a die roll. The roll of a miss here simulates the movement of an enemy ship in an unexpected vector. Naturally, your Blazer strength must exceed his shield strength before any die rolling occurs.

5. MISMATCH OPTION: To enhance the suspense element where no player knows what type weaponry is being carried by his opponent, turn all ship counters upside down and mix them up. Each player draws a counter to represent the ship he'll captain in the game. Next, place each hit record into a separate envelope. Mix them up and let each player draw one. Since it is highly unlikely that the ship drawing he already has in his possession will match the ship drawing on the hit record card drawn, no player will know for sure what type of equipment his opponent has until it's too late.

[The following was not included in the Fifth Edition rules, but is added here by the transcriber for your bemusement. Any reference to tics refers to the compass used on the ships in the Star Fleet Battle Manual.]

6. VECTOR MOVEMENT: To better simulate what it's really like to maneuver in the airless, gravity-less void of space, where there's nothing to push against when you turn, or slow you down when you stop accelerating, use these vector movement rules. In order to use vector movement, each player will need a coin, washer, or similar small, flat marker. Vector movement adds a ship's Heading to its Speed and Course. These are also used a bit differently. NOTE: Vector movement assumes that all movement is sub-light, so the game scale is changed somewhat.

Before movement, place the flat marker under the center of the ship counter. Write the ship's Heading under the Course column on the hit record (at the beginning of the game, the Course is the same as the Heading: straight forward at 0° [200 tics]). Write the Course (change) under the Dive column, and Speed (in inches, if you wish) in the Hold column. If using the Altitude rules, write either "H", "D", or "C" under the Climb column to indicate either Hold, Dive or Climb.

To move the ship, stretch the firing string along the tic mark indicated by its Heading. Measure along the string the distance shown by its Speed, and move the ship counter to that point without changing the facing of the ship. Leave the small marker showing where the ship began its movement. Now, turn the ship according to the normal movement rules as indicated by the Course written under the Dive column. Finally, move the ship straight ahead (or backward, if reversing thrust) according to the normal movement rules and the amount written under the Warp Energy column.

Now comes the hard part: stretch the firing string back to the center of the small marker you left where the ship began movement. Read the tic mark the string crosses and either add 180° (200 tics) if the tic mark is less than 180 (200) or subtract 180° (200 tics) if the tic mark is greater than 180. Write this number under the next turn's Heading. Measure the distance from the center of the ship counter to the center of the small marker. Write this number under the next turn's Speed. Finally, to end the ship's movement, place the small, flat marker under the center of the ship counter.

If a ship puts no energy into movement, it continues at the same Speed and Heading as the previous turn. A ship gets its full acceleration allowed by the amount of energy put into movement, regardless of how fast it moved or how much energy was put into movement the previous turn.

At your discretion, you can continue to limit ships to 45° (50 tics) maximum turn while at speed. Alternately, you can allow ships to put more energy into turning farther. For example,

1 extra point gets up to 90° (100 tics), 2 extra points gets you 180° (200 tics). Or just let them turn as far as they want, as long as some energy is put into movement. It's up to you. Just make sure you agree on what you're doing before the game starts.

FLEET RULES

When conducting fleet size games of four or more players, the following rules may be used:

1. No one may advise an ally about tactics or weaponry choices to be used.
2. A home base must be designated. Ships that suffer damage may be repaired at the home base at the rate of one damage point repaired per turn.
3. The side that destroys the other's home base first wins!
4. As each player finishes writing and moving, he calls out his number. The first finished calls out 'one', the second calls out 'two', etc. This is the order in which they fire after all players have called out a number, Damage inflicted is immediately effective and may prevent another player from shooting if it's severe enough.
5. A tin can or something of your own design can be used as a home base piece. The base can be given shields and some form of weaponry. A separate commander should be designated to man the home base. The home base may move at the sub-light speed of one inch per turn.
6. A ship destroyed by combat cannot be towed back to port and re-crewed unless provisions for this are worked out before the game begins. We further suggest that the number of shields and maximum strength of base weapons be agreed upon before the game begins. For example, a base with a strength of eight could have four shields and a strength four Blazer, or four javelin torpedoes. His counterpart may choose to have a shield of six and two Blazers, or perhaps a strength two Nytron lance/cube generator, etc.

ALIEN SPACE CAMPAIGN RULES

[*Transcriber's note: Rather than use the lame-o half-baked rules provided in the Fifth Edition, you would be better served just using Alien Space as the ship-to-ship combat portion of your favorite galactic conquest game. Use the Ship Building Formulas below to approximate the ship types in your game, or just make up your own! Ed.*]

SHIP BUILDING FORMULAS

[Portions of this section have been modified to give more consistent and even results. Ed.]

ENGINE COSTS

The number of hits a main engine survives prior to stopping is part of its building cost in credits. A main engine that needs 8 hits to stop it costs 8. All auxiliary engines cost .5 credits per hit.

The Kuzi has a total of 15 main engine factors and 3 auxiliary factors to make a total cost of 16.5. The 16.5 pays for the strength and stamina, but the efficiency cost must also be computed. The strength of all engines combined (16.5 for the Kuzi) is multiplied by the energy spent at every speed up to and including into maximum safe speed.

For example: the Kuzi engines cost 16.5 and at warp factor 1 the ship moves 1, which is 100% efficiency so a factor of 100 must be used in the multiplication. 16.5 strength, times warp factor 1, times one unit of energy, times 100 efficiency = 1,650. To move at warp 2, 16.5 strength times warp 2, times 2 units of energy times 100 efficiency = 6,600.

16.5 strength, times warp 3 times 3 units of energy times 100 efficiency = 14,850.

16.5 strength, times warp 4 times 5 units of energy (divide 4 by 5 to get efficiency of 80) times 80 efficiency = 26,400

16.5 strength, times warp 5 times 8 units of energy (divide 5 by 8 to get 62.5) times 62.5 efficiency = 41,250.

16.5 strength, times warp 6 times 11 units of energy (divide 6 by 11 to get 54.5) times 54.5 efficiency = 59,350 (ignore fractions).

16.5 strength, times warp 7 times 14 units of energy times 50 efficiency = 80,850.

After adding all the costs listed above, the Kuzi engine table totals 230,950. To give it the ability to move faster than its maximum safe speed at the same energy, pay double the cost of the engine as computed so far. 230,950 times 2 = 461,900. So, 230,950 plus 461,900 totaled together are 692,850 which is the cost of the Kuzi engine. If more energy is required to exceed max safe warp speed, divide energy needed for max safe speed by energy needed to exceed max safe speed. For example, the Zeron needs 8 units of energy to go at maximum safe speed. To exceed max safe speed he must spend 9 units of energy. 8 divided by 9 – 88 efficiency factor. Its engine cost to go max safe speed is 264,898. To exceed max safe speed he pays double, which is 529,796. However, additional energy is required to go beyond max safe speed, so the percentage of extra energy (88) is multiplied by 529,796 to diminish the cost of overdriving to 466,220. 466,220 plus 265,898 = 731,118 for the Kuzi engine.

SHIELDS

Pay one point for each degree of protection coverage and multiply this by 100 times the number of defensive factors the shield has. Because the Kuzi defends 360° with 4 factors, 360 X 400 = 144,000. [*A ship may have more than one shield, but cannot have two shields covering the same area. For example, a ship can have one shield covering 360°, two shields covering 180° each, three shields covering 120° each, four shields covering 90° each, etc. Each of these configurations will give full coverage to the ship, but multiple shields will take damage separately. Add together the cost of each shield. Of course, a ship doesn't* ***need*** *to have 360° shield coverage, you can leave parts of the ship unshielded if you want. Ed.*]

SENSORS

Sensors cost 1 [point] per degree of coverage times the number of back-up systems, times the sensing distance in inches. The Kuzi can sensor in 360° and has 4 back-up systems and he can sensor out to 72 inches so 1 X 360 X 4 X 72 = 103,680. Ships without 360° sensing out to 72 inches must move first. Ships that sense beyond 72 inches move last.

LIFE SUPPORT

Life Support systems cost 100,000 for each back-up factor, so 5 life supports = 500,000.

BLAZERS AND PHASERS

Blazers and Phasers cost one point for each degree or tic mark [Radian] over which they fire. This is multiplied by the number of inches of range and by the max power that can be fired. The Kuzi can fire two strength 5 blasts over 180° each out to 72 inches: 2 X 5 X 180 X 72 = 129,600. [Remember than the last 12 inches (1 foot) of Blazer/Phaser fire is reduced by 1 unit of damage.]

COST OF KUZI RECOMPUTED

Engines	731,118
Shields	144,000
Sensors	103,660
Life Support	500,000
Blazers	129,600
	1,608,378

[The following section was not included in the Fifth Edition rules. It is extrapolated and condensed from various notes on the Ship Record Sheets.]

SPECIAL WEAPONS

Ship Special Weapons come in four basic types: Beam (instantaneous), Ordnance (torpedoes), Area Effect (cones, etc.) and Other. There is a general formula for all special weapons. Each type adds its own special element. The general formula is this:

Number of weapon banks	X
Arc of fire (in degrees or tic marks)	X
Maximum Damage/Generators	X
Range in Inches	X
Width of Beam/Fire	X
Blast Radius (in inches)	=
Sub-Total	

The thing that makes special weapons different from Blazers and Phasers, are their effects. Each special weapon must have a complete written description of its effects, how it's used, range, arc(s) of fire, beam width, blast radii, any special abilities, flaws, etc.

BEAM TYPES: Beam-type special weapons do damage instantaneously, just like Blazers and Phasers. Since the width of the beam is usually 1°, it can usually be ignored. The blast radius is also usually 1" (contact only) and so can then be ignored. If the weapon has some kind of special ability, such as "ignores shields", "changes the target's movement in some way", "target totally destroyed", etc., multiply the standard total by 100. Multiple abilities don't add extra multipliers. If the weapon has some flaw that makes it unreliable in some way, subtract 500,000.

Examples: the Dort Gapper Zapper has one bank that fires over 360° to a range of 36 inches, ignores shields but not Nytron Cubes, and totally destroys the target ship, so 360 X 36 X 100 – 500,000 = 796,000.

The Repazoid Tentacle Beam fires over 360°, is 2° wide out to 36 inches for 9 units of damage, changes the target's movement, but doesn't work unless the entire beam strikes the target: 360 X 2 X 36 X 9 X 100 – 500,000 = 22,828,000.

The Rojun Nuclear Device can be transported out over 360° to a range of 84 inches. It has a blast radius of 12 inches for a maximum 10 points of damage but has only one shot (like ordnance weapons, below). It stuns a ship for several turns, but cannot be fired less than 60 inches: 360 X 84 X 12 X 10 X .01 X 100 – 500,000 = 3,128,800

ORDNANCE WEAPONS: Ordnance-type special weapons fire some type of missile that usually move across the play surface over the course of several turns. Include the speed of the torpedo (at maximum damage if differing speed/damage amounts) and the width of the tracking arc divided by 100 into the formula. If there is a limited number of them, multiply the standard formula by the ammo limit divided by 10 (if the ship has 20 torpedoes, multiply the formula by 2.0).

Examples: the Zeron Stalker Pods fire over 360°, move at warp 2 for 6 points of damage, with a 360°-tracking arc. It fires out to 4 feet in its first turn, and has a blast radius of 12 inches. 360 X 2 X 6 X 3.60 X 4 X 12 = 746,496.

The Rux Javelin Torpedoes have 6 launchers, carries 20 torpedoes that fire over 360°. They accelerate 12 inches per turn for 4 turns, with a blast radius of 12 inches and a tracking arc of 1° (straight forward only): 6 X 2.0 X 360 X 12 X 4 X 12 X .01 = 24,883 (drop fractions).

The Tholian Web does a maximum of 7 damage, lays a semi-permanent barrier behind itself (1° arc of fire) that does not take damage from weapons and deteriorates over time: 7 X 100 X .01 X 100,000 – 500,000 = 200,000

AREA EFFECT: Area effect special weapons use templates (usually cone-shaped) to catch multiple enemy ships.

Examples: The Rojun Magma Intensifiers have 6 magma generators creating 4 templates that are each 17 inches long and 5° wide. It has a firing arc of 1° (forward only). Three of the templates have automatic destruction, while the fourth does 7 points of damage: 6 X 4 X 17 X 5 X .01 X 300 X 7 = 42,840

The Romulan Plasma Bolt uses 8 generators to create a 4 templates that are each 14 inches long and 5° wide. It has a firing arc of 1°. Three of the templates have automatic destruction, while the fourth does 8 points of damage: 8 X 4 X 14 X 5 X .01 X 300 X 8 = 53,760

OTHER TYPES: This is the miscellaneous class of special weapons. Primarily it's for defensive things such as Cloaking Devices or Transparenators, fighter bays and launchers,

etc. They usually have no firing arc, blast radii, range or beam width. Fighter Bays cost 1,000 for each fighter carried, and Fighter Launchers cost 1,000 each.

Examples: The Rojun Transparenator has 6 generators that make it invisible (and a smaller target) over 360°: 6 X 100 X 360 = 216,000
The Romulan Cloaking Device has 6 generators that make it invisible over 360°: 6 X 100 X 360 = 216,000 [*Wow! What a coincidence! Ed.]*

The Zark Nytron Cube is more powerful than any shield, so it costs 10 times as much. If you come up with something more powerful than Nytron, it will cost 10 times more than Nytron, or 100 times more than normal. The Nytron Cube uses 3 generators. It can be used offensively over 360°, out to a range of 36 inches. 10 X 3 X 360 X 36 = 388,800.

FIGHTERS

Let's see if we can use the ship building formulas to create small one- and two-man fighters. To make a fighter, remember that the cost per ship must be kept as low as possible.

One of the most important things about a fighter is its limited fuel supply, so let's give him 2 auxiliary engines which give 100 Light Speeds each [*5 inches or Warp 2.5*] per fuel factor. Each engine uses ½ a fuel factor per burn and the ship carries only 8 factors of fuel. Each engine may not burn more than 1 full energy unit per game turn. During each turn in which it does not burn fuel, it coasts by losing 10% of its speed. Turning costs nothing, but the ship can not turn more than 90° per game turn: 1 X 100 X 2 X 8 = 1,600.

A minimum of 1 shield factor covering 360° is: 1 X 360 = 360

Since the ships that have the best sensors move last, this ship should sensor out to 73 inches and 360°. If they could only scan out to 72 inches in a 20° arc, they would be cheaper to build, but they would have to move before any other ship which has better sensor equipment: 1 X 73 X 360 = 26,280.

Life support for one person costs 1,000.

At this scale, the energy needed to power sensors and life support for only one or two people is inconsequential. Though they need to be paid for, they require no energy to operate.

By giving it 2 Photon Torpedo mounts that fire only in the direction he points (1° firing arc) out to 36 inches with no tracking, you get a cheap weapon system. They use all the energy from the engines to operate, so shields and movement can't be used in the same turn the Photon Torpedoes are fired, but that's life: 2 X .01 X 100 X 36 = 72.

Putting 4 Impact Missiles on the outside of the fighter cause it to slow down faster when coasting: an extra 10% per missile carried. A fighter can only launch one missile per turn. It fires only straight forward (1° arc of fire) and causes 5 units of damage. It only coasts toward its target (loses 10% of its speed per turn) for a maximum range of, let's say 175 inches (if launched at a speed of 20 inches). It does no damage unless it actually hits its target: .4 X 5 X .01 X 175 = 3 (dropping fractions).

Engines	1,600
Shields	360
Sensors	26,280
Life Support	1,000
Photon Torpedoes	72
Impact Missiles	3
Cost of Fighter	29,315

Mother ships must be at least twice the physical size of the fighters carried, so a mother ship with 4 half-inch fighter counters must measure at least 4 square inches because 4 half-inch fighters = 2 square inches.

Formulas for installing defensive armament, engines, life support and so forth were explained earlier, as were costs for fighter bays and fighter launchers.

When launching fighters, remember that the fighter's speed is the same as the mother ship's speed, plus what it gets from its fuel burn, if launched in the forward direction. Assume the mother ship is moving at 100 Light Speeds [*5 inches, Warp 2.5*] and launches 2 fighters in a forward direction. During the launching turn, each fighter burns 1 unit of fuel and increases its speed by 200 [*10 inches, Warp 5*] in relation to the mother ship, but in relation to the playing surface they are moving 300 [*15 inches, Warp 7.5*]. Mother of 100 [*5 / 2.5*] + acceleration of 200 [*10 / 5*] = 300 [*15 / 7.5*] speed.

If one fighter carried 4 external Impact Missiles, and the other had none, in the next turn the one with the external load would coast at a speed of 150 [*7.5 / 3.75*], while its companion coasted at a speed of 270 [*13.5 / 6.75*]. Since the one with the external load loses 10% for itself, plus 10% more for each external missile carried, he slows down by 50% per game turn. In the next turn, if both continued to coast, the one that had been going 270 loses another 10% of 270 which is 27. His speed is 270 – 27 = 243 [*12 / 6*]. The one with the missiles loses 75 because 150 – 50% = 75 [*3.75 / 1.8*]. Ignore fractions of a Light Speed.
If the speed of the mother ship is added to the speed of the fighter when launched forward, it must be subtracted from the speed of the fighter if it is launched through a rearward facing launch port. The speed of the mother ship would be ignored if the fighter is launched sideways.

When using fighters it seems unrealistic to make everyone move simultaneously. If all have the same sensor range, roll the die to see which team must move its units first. All fire will still be done simultaneously, but with fighters moving last in each game turn; it makes it easier for them to line up shots on large ships.

The loser of the die roll moves all his major ships (Cruisers, Scouts, Destroyers, Carriers, etc.) Then the winner moves all of his major ships. Then the loser moves all his fighters, followed by the winner moving his fighters.

EXPANDING ALIEN SPACE TO INCLUDE THE STAR FLEET BATTLE MANUAL

Alien Space is a companion game to the STAR FLEET BATTLE MANUAL, which is why you'll see Star Fleet Destroyers on the cover of ALIEN SPACE and Alien Space Kuzi ships on the cover of the STAR FLEET BATTLE MANUAL. Although each game is complete by itself, using the rules provided in the STAR FLEET BATTLE MANUAL can link the two games.

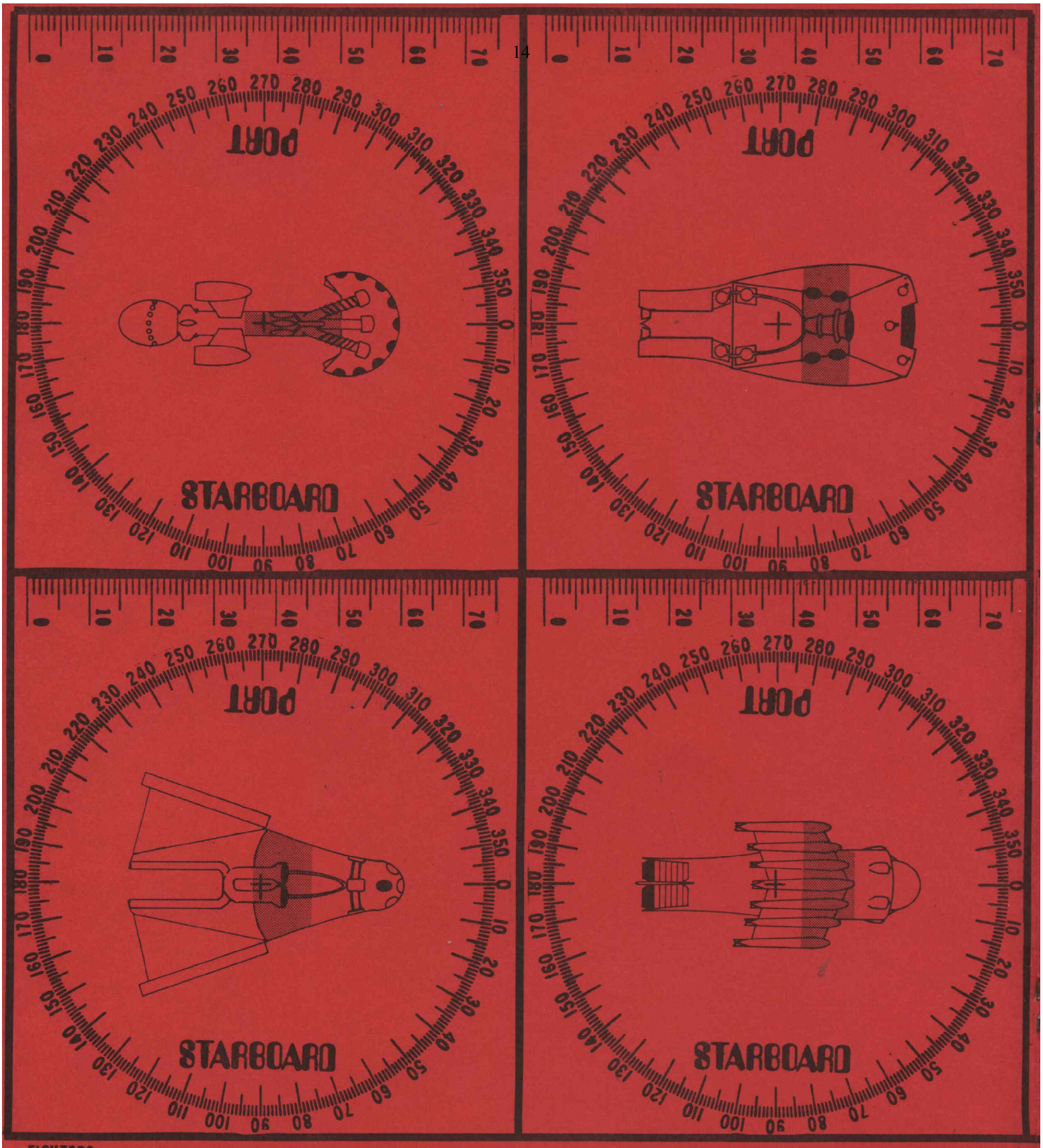
DESIGNER'S NOTES

The speed scale printed on the left side of each ship counter serves two functions. It is used to measure the distance a fighter travels during one game turn. It can also be used by ALIEN SPACE ship captains who wish to convert over to the STAR FLEET movement system. Although I recommend that each game retain its own movement system when the two are combined, you have the option to switch. Out-of-play counters can be used to measure fighter movements.

Each time the previous edition of these rules are sold out, I try to incorporate suggestions made by fans, and improvements or refinements which were not thought of before.

This is the first edition to offer Fighter types and Campaign Rules. A number of fans have written requesting scenarios but I have too little time left for playtesting and designing to work up any.

[What follows is a long diatribe whining about how book publishing and layout work against you. It's really boring and has nothing to do with how the game was designed, why certain design decisions were made, and other things that are really supposed to be in the designer's notes]



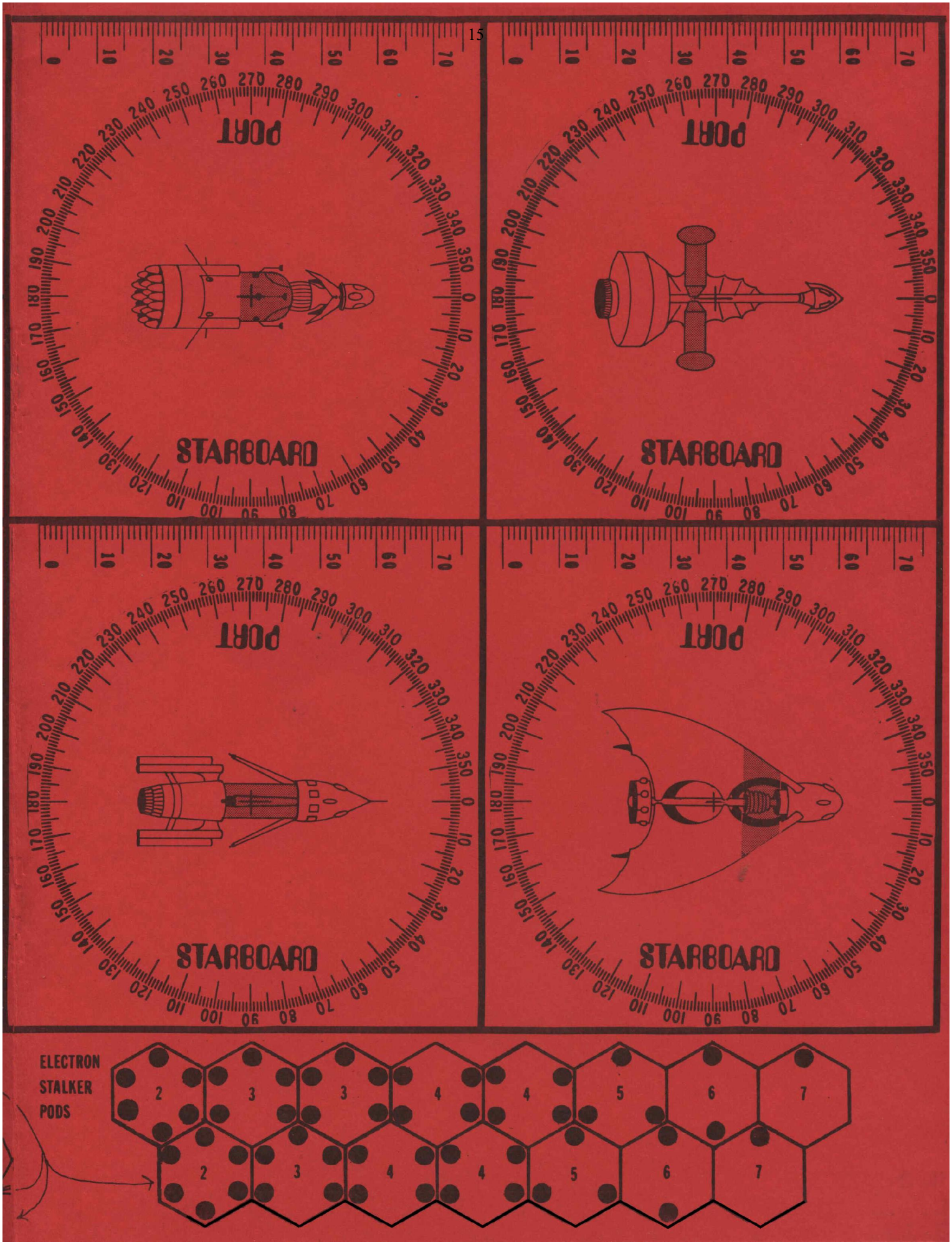
FIGHTERS

CUT ALONG HEAVY LINES

JAVELIN TORPEDOES

PROTON MINES

1	1	1	1	1	2	2	2	2	2	3	3	3	3	3	4	4	4	4	5	5	5


PORT
STARBOARD
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Oort

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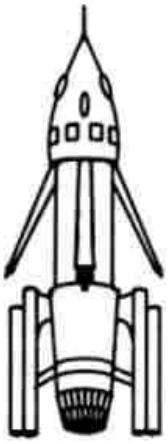

HITS

(Cross off high numbers as damage occurs to show power left)

Hits aft of shaded area

MAIN ENGINE	1 2 3 4 5 6 7 8 9 10 11 12
AUXILLARY ENGINE	1 2 3 4 5 6
BLAZER GENERATORS	1 2 3 4 5 6
GAPPER ZAPPER	1 2 3
DEFENSIVE SHIELD	1 2 3 4 5
SENSORS *	1 2 3 4
LIFE SUPPORT SYSTEM *	1 2 3 4 5

Hits in cabin area

Hits in shaded area

*=Use one unit of energy to operate

1) Fill out all categories except Fire Angle and the strength of blazers and shields.
2) Move ships
3) Record blazer, shield and special weapons.
4) Fire weapons
5) Resolve fires
6) Revert to step 1. NOTE: Blazers and special weapons cannot fire in the same turn.

SPEED

WARP speed	1 2 3 4 5 6 7 +
ENERGY USED	1 2 5 6 8 10 13 11

COURSE	COURSE ALTITUDE				FIRE ANGLE	FIRING ALTITUDE				TURN #		TOTAL ENERGY	LIFE SUP-PORT ENERGY *	SENSOR ENERGY *	COURSE CHANGE OF WARP ENERGY	GAPPER-ZAPPER OF BLAZER ENERGY	SHIELD ENERGY	TOTAL EN-ERGY USED
	CLIMB	DIVE	HOLD			CLIMB	DIVE	HOLD										

DORT SPECIAL WEAPONS

In addition to a blazer battery, the Dort has a Gapper Zapper. The blazer and gapper zapper cannot be used in the same turn simultaneously. Use one or the other but not both. The gapper zapper is created by three special generators which consume three units of energy and give the weapon a three foot range. When two generators are used, the energy required is two and its range shrinks to two feet. When only one generator is used, one unit of energy is used to give a range of one foot. It is not possible to increase range by putting in more power, if the generators have been damaged.

The gapper zapper is a split twin beam of antimatter. If both sides of the beam cross an enemy ship, the circuit is completed and the target is destroyed. Both beams must touch to complete the circuit. If only one beam touches, there is no damage caused. The zapper is only degree wide and slightly unpredictable. To use it, record the fire angle over which it is to go and roll a die. If a 2-3-4-5 is rolled, the shot falls as specified. If a 1 is rolled, the shot is off by two degrees to the left. If you had ordered a shot on the 080 vector, you would normally hit on 808 and 081. But a roll of 1 on the die could cause your shot to fall on 078 and 079. It is assumed that the second beam always goes out one degree to the right of the angle recorded as your fire heading. If a 6 were rolled, the shot would be two degrees to the right of your intended heading.

The gapper zapper is immune to normal defensive shields but cannot penetrate Nytron. If only one side of the gapper zapper touches the victim, no damage occurs. Since the tentacle beam is somewhat similar to the gapper zapper design, there is a 50% chance that your energy will be neutralized if both weapons are used in the same turn, against each other. Roll a die to determine the outcome. If a 1-3-5 is rolled, the tentacle beam causes damage to your ship while the effect of your zapper is nil. If a 2-4-6 is rolled, the tentacle becomes useless and your zapper turns him into a crispy critter!

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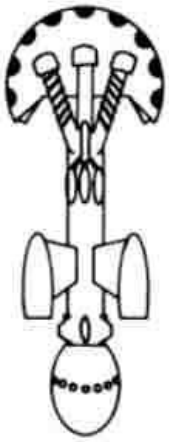
Earthship



HITS

(Cross off highest number as damage occurs to show power left)

STARBOARD ENGINE	①②③④⑤⑥⑦⑧	Hits aft of the shaded area
PORT ENGINE	①②③④⑤⑥⑦⑧	
AUXILLARY ENGINE	①②③④	
BLAZER PROTON GENERATORS	①②③④⑤⑥	Hits in cabin area
DEFENSIVE SHIELD	①②③④⑤⑥	
SENSORS *	①②③④	Hits in shaded area
LIFE SUPPORT SYSTEM *	①②③④⑤	

*=Use one unit of energy to operate

1) Fill out all categories except Fire Angle and the strength of blazers and shields.
2) Move ships
3) Record blazer, shield and special weapons
4) Fire weapons
5) Resolve fires
6) Revert to step 1. NOTE: Blazers and special weapons cannot fire in the same turn.

SPEED

WARP speed	① ② ③ ④ ⑤ ⑥ ⑦ ⊕
ENERGY spent	① ② ③ ⑤ ⑦ ⑩ ⑬ ⑭

COURSE	COURSE ALTITUDE				FIRE ANGLE	FIRING ALTITUDE				TURN #		TOTAL ENERGY	LIFE SUP-PORT ENERGY *	SENSOR ENERGY *	COURSE CHANGE OR WARP ENERGY	BLAZER ENERGY	SHIELD ENERGY	TOTAL EN-ERGY USED
	DIVE	CLIMB	HOLD			DIVE	CLIMB	HOLD										

EARTHSHIP SPECIAL WEAPONS

In addition to providing power for blazer fire, the blazer generator can be used to create proton torpedoes or proton mines. The generators can be used for blazers or for proton weaponry, but not both in the same turn.

PROTON TORPEDO

One proton torpedo can be generated in each turn by each undamaged blazer generator. Torpedoes can be salvoed singly, in pairs or in two bursts of three each. When salvoed one at a time, each torpedo strikes with the effect of a strength one blazer and costs one unit of energy each to make. When salvoed in pairs, both torpedoes strike simultaneously which gives them the effect of a hit by a strength two blazer. A salvo of three has the power of a strength three blazer beam. The main difference between shooting blazers and proton torpedoes is that the blazer cannot correct its fire angle if it misses, but the second and third salvo of the proton torpedoes fired during the same turn may each change their fire angle by two degrees. If the first salvo fired at 276 missed the target, the second salvo could go out on a heading of 278. If three were fired, the third salvo could follow the second salvo on the 278 heading if the center of the target had been hit or it could correct to fire on 280 if necessary to put hits into the center of the target. Since proton torpedoes have limited homing capability, they must correct by up to two degrees on second and subsequent salvoes or by as little as one half of one degree to put hits directly into the center of the target.

The number of torpedoes fired in each salvo must equal the number to be fired in following salvoes during that same turn. Maximum range for proton torpedoes is five feet. They strike their target in the same turn during which they were launched. When three torpedoes hit a shield set for two factors of defense, only one point of damage is inflicted. Proton torpedoes must correct step-by-step if elevation rule is used. Proton torpedoes fired for dive would correct to hold before progressing to the climb vector with the third salvo.

PROTON MINE

The earthship can make either mines or torpedoes, but not both in the same turn. The earthship can lay a maximum of five proton mines in each game turn. The maximum number of mines laid is always one less than the number of generators used so if only four generators are operating, only three mines will be laid. You have the option of laying three strength one mines, or one strength three mine, or a strength two and a strength one in this example. Proton mines are the little numbered squares of red cardboard. When laid, they are placed with their number facing down so enemy ships will not know how dangerous they are. They can be placed at any interval within the distance covered by the last move.

When detonated, each mine radiates its damage value out to three feet. Mines which detonate another mine in a chain reaction cause only their rated units of damage for each mine set off. Thus, something within the blast radius of both mines would suffer two separate hits, one from each mine, rather than a combined blast. However, mines can be set off at any time by the earthship so that simultaneous damage can be inflicted. In a case like this, a strength three and another strength four mine would combine to deliver seven units of damage to the victim. The victim decides which system suffers damage because mines cause general rather than specific damage.

Mines can be prematurely detonated by blazer fire and other types of weaponry. See the weapohry cross index table on the back. Like blazers, the strength of the proton mine detonations must be greater than the shields to cause damage. Since proton mines can be detonated during any portion of the game turn, a moving ship affected by a mine is assumed to have the shield setting written on its hit record at that instant.

A cluster of five strength one mines detonated simultaneously would cause five units of damage to any ship without shields which was within their three foot blast radius. A ship which had shields set to three would suffer only two units of damage.

Proton mines which detonate in the turn during which a ship within their blast area also receives blazer fire would not add their power to that of the blazer hit. Each blow is evaluated separately. If a ship counter touches a proton mine, the mine explodes. Even when earthships are beyond sensor range of their mines, they can still detonate them.

Kuzi

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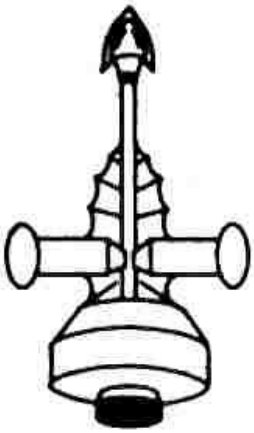

HITS

(Cross off highest number as damage occurs to show power left)

STARBOARD ENGINE	①②③④⑤⑥⑦⑧	Hits aft of shaded area
PORT ENGINE	①②③④⑤⑥⑦⑧	
AUXILLARY ENGINE	①②	
STARBOARD BLAZER GENERATORS	①②③④⑤	Hits in cabin area
PORT BLAZER GENERATORS	①②③④⑤	
DEFENSIVE SHIELD	①②③④	
SENSORS *	①②③④	Hits in shaded area
LIFE SUPPORT SYSTEM *	①②③④⑤	

*=Use one unit of energy to operate

1) Fill out all categories except Fire Angle and the strength of blazers and shields.
2) Move ships
3) Record blazer, shield and special weapons.
4) Fire weapons
5) Resolve fires
6) Revert to step 1. NOTE: Blazers and special weapons cannot fire in the same turn.

SPEED

WARP speed	①②③④⑤⑥⑦⊙
ENERGY spent	①②③④⑤⑥⑦⑧

COURSE	COURSE ALTITUDE				FIRE ANGLE	FIRING ALTITUDE				TURN #		TOTAL ENERGY	LIFE SUPPORT ENERGY	SENSOR ENERGY	WARP OF COURSE CHANGE ENERGY	BLAZER ENERGY	SHIELD ENERGY	ENERGY USED
	DIVE	CLIMB	HOLD		P / S	DIVE	CLIMB	HOLD										

KUZI SPECIAL WEAPONS

The Kuzi has no special weaponry but does carry twice the normal compliment of blazers. His field of fire is somewhat restricted. Between 330 and 030, he can combine the fire of both blazer batteries and put a maximum strength 10 blast on anything within five feet, or a strength 9 blast out to six feet. When firing on targets beyond the 330-030 cone, only one battery may be brought to bear. He may fire one shot from each side at the same time if he desires; i.e., one shot on a heading of 090 and a second shot on heading 220. Each shot may carry a strength 5 jolt if enough energy is used. The Kuzi has a blind spot and cannot bring either of his blazers to fire on any heading between 150 and 210, although he can fire on 150 and 210 headings. If he is tentacled by a ship sitting in his blind spot, he may use his blazers on other ships but cannot fire through his blind spot at the tentacle launcher.

If the Kuzi hits an enemy shield with two blazer beams fired on two different compass headings, the result is two separate hits, each of which is dealt with by shields separately. Only when both blazers fire on the same heading can they combine their power.

Hits on the Kuzi portside cabin area can only be logged against his shield or port blazers. His starboard blazers cannot be disabled from damage inflicted on the port side and vice versa. This same logic applies to ships with port and starboard engines.

HIT RECORD SHEET

Repazoid

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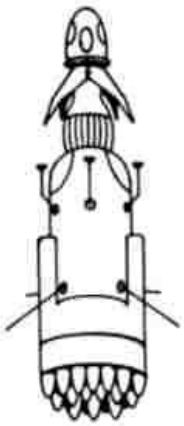

HITS

(Cross off highest number as damage occurs to show power left)

Hits aft of shaded area

MAIN ENGINE	1 2 3 4 5 6 7 8 9 10 11 12 13 14
AUXILLARY ENGINE	1 2 3 4
BLAZER GENERATORS	1 2 3 4 5 6
TENTICAL BEAM GENERATORS	1 2 3
DEFENSIVE SHIELD	1 2 3 4 5
SENSORS *	1 2 3 4
LIFE SUPPORT SYSTEM *	1 2 3 4 5 6

Hits in cabin area

Hits in shaded area

*=Use one unit of energy to operate

1) Fill out all categories except Fire Angle and the strength of blazers and shields.
2) Move ships
3) Record blazer, shield and special weapons.
4) Fire weapons
5) Resolve fires
6) Revert to step 1. NOTE: Blazers and special weapons cannot fire in the same turn.

SPEED

WARP speed	1 2 3 4 5 6 7 +
ENERGY USED	1 2 4 5 8 10 12 12

COURSE	COURSE ALTITUDE				FIRE ANGLE	FIRING ALTITUDE				TURN #		TOTAL ENERGY	LIFE SUP-PORT ENERGY *	SENSOR ENERGY *	COURSE CHANGE OF WARP ENERGY	AUX OF MAIN TENTICAL OF BLAZER ENERGY	SHIELD ENERGY	TOTAL EN-ERGY USED
	DIVE	HOLD	CLIMB			CLIMB	DIVE	HOLD										

REPAZOID SPECIAL WEAPONS

In addition to a blazer battery, the Repazoid ship has a special tentacle beam. The tentacle beam and Blazer cannot be fired together. Use one or the other but not both at the same time.

The tentacle beam is two degrees wide and is created by tentacle generators. Neither Repazoid nor victim's shields may operate while the tentical is used. The tentacle beam cannot be intercepted. When all three tentacle generators operate, the beam has a one foot range and uses only one unit of energy. Only one item may be tentacled at a time.

The tentacle is cast by announcing both angles over which the tentacle is being cast. If either of the degrees announced touch, the target is caught and its shields eliminated. The tentacle causes three units of damage for each tentacle generator employed. Thus three generators fired out to one foot or out to three feet cause nine units of damage. A single generator could not fire beyond one foot, nor could it inflict more than three units of damage. The tentacle neutralizes and disolves normal and Nytron shields. When used against Nytron cubes, the tentacle itself disolves without causing damage. A tentacle mistakenly cast at a Nytron cube which prematurely dissolved would cause regular damage.

The tentical victim distributes the damage suffered to each system on his ship as he chooses. When casting the tentacle, circle on the hit record the word 'main' if the victim is expected to use main power systems to provide energy for his weapons. Circle the word 'auxiliary' if the energy for his blazers is expected to come from the auxiliary motors. After the power source is circled, the victim states one or the other. Failure to correctly identify the power source entitles the victim to use his blazer on the shieldless Repazoid ship. Correct identification of the power source blocks the victim's return shot. Whether the shot is blocked or not, the victim will suffer three units of damage for each tentacle generator used during each turn held. The victim must attempt to operate his blazers during each turn he is held. A ship with only two auxiliary engines could not cause more than two units of damage if blazers were powered by auxiliary energy. Special weapons cannot be used to break the tentacle hold. The victim must cancel any other fire planned and shoot blazers at the Repazoid if tentacled successfully. Magma is the regular weapon of the Rojun and would be used if tentacled.

The tentacle may be held in place in following turns by continuing to forecase which system energizes the victim's blazers. The victim must shoot at the Repazoid to break contact and is not allowed to shoot at anything else while tentacled. The Repazoid cannot use another tentacle or his blazers or shields while holding a victim. Failure to anticipate which engine is used allows the victim to fire back and break contact. Naturally, a ship whose auxiliary engines were destroyed could not claim to be using auxiliary power for his blazers. The victim may fire at anyone after the turn in which contact is broken and may energize shields. In the turn the tentacle is applied successfully for the second consecutive time, the victim's ship must move in the same direction and speed as the Repazoid whose tentacle holds him captive. In the turn the tentacle is dropped or broken, the victim moves at warp 2 on his former heading, away from the Repazoid before combat occurs. The tentacle cannot be cast again at a victim who breaks free until one full move and fire cycle has been completed. After breaking free, both ships could shoot blazers at each other during the next fire cycle, or the victim may launch his special weapon. The Repazoid cannot cast his tentacle in a different direction each game turn. While it can be maintained in place for consecutive turns, once used, a full fire cycle must pass before it can be employed again. While holding a victim, both ships must coast on the last heading of the Repazoid if the tentacle is being applied for more than one turn.

The tentacle beam may also be used to grapple and redirect a javelin torpedo on any new course desired. Javelin torpedoes which have been redirected by a tentacle beam still blow up after travelling the original destination distance set up by the Rux player.

The tentacle beam is occasionally an effective defense against a gapper zapper. If you use a tentacle beam on a Dort in the same turn during which he is shooting you with his gapper zapper roll the die to determine the outcome. 1-3-5 on the die means your tentacle beam causes him damage while his zapper does nothing. If a 2-4-6 is rolled, your tentacle causes no damage and his zapper causes its normal damage.

Rojun

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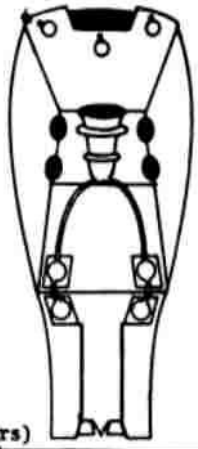
While Transparenated shots thru hiding square hit as follows...
roll 1-2=Cabin, roll 3-4=shaded, roll 5-6=Engines.

1	2	3	4	5	6	7	8	9	10
11	12	13	14	15	16	17	18	19	20
21	22	23	24	25	26	27	28	29	30
31	32	33	34	35	36	37	38	39	40
41	42	43	44	45	46	47	48	49	50
51	52	53	54	55	56	57	58	59	60
61	62	63	64	65	66	67	68	69	70
71	72	73	74	75	76	77	78	79	80
81	82	83	84	85	86	87	88	89	90
91	92	93	94	95	96	97	98	99	100

GAME STARTING LOCATION

_____



HITS

(Cross off highest number as damage occurs)

STARBOARD ENGINE	①②③④	Aft of shaded area
PORT ENGINE	①②③④	
AUXILLARY ENGINE	①②③④⑤⑥⑦⑧	
MAGMA INTENSIFIERS * Turns of intervals:	① 5 ②③ 4 ④⑤⑥ 3	
TRANSPARENATORS Turns of delay:	① 2 ②③ 1 ④⑤⑥ Instant	
DEFENSIVE SHIELD	①②③	CABIN
SENSORS*	①②③④	shaded area hits
LIFE SUPPORT*	①②③④⑤	

*Use one energy unit to operate.

COURSE	COURSE ALTITUDE				MAGMA FIRE ANGLE	OFF TEMPLATE MOVEMENTS				TURN #		TOTAL ENERGY	LIFE SUP-PORT ENERGY *	SENSOR ENERGY *	MOVEMENT ENERGY *	SHIELD ENERGY	MAGMA ENERGY *	TRANSPAREN-ATOR ENERGY	TOTAL EN-ERGY USED
	DIVE	CLIMB	HOLD																

ROJUN SPECIAL WEAPONS SHEET

Before this ship can be used in a game, you must draw a 10 inch by 10 inch matrix on a separate sheet of cardboard. Number the matrix exactly like the miniature one pictured on the Rojun hit sheet. The four Magma templates should also be cut out from the special sheet provided, and mounted on four separate sheets of cardboard to increase their lifespan.

Most of the starships in this game are Cruiser class vessels. The Rojun ship is more like a submarine class ship, and therefore, cannot afford to slug it out toe to toe with the others. To win, you must rely on surprise and stealth. One of the biggest assets this ship has is its Transparenator. The transparenator shrinks the Rojun ship to 1/4th of its regular size and also makes it invisible to other players.

The Rojun ship has two main engines which generate four units of power each, per turn. It also has an auxiliary engine which makes eight units of energy each turn. Since the Rojun ship cannot move at light speeds, its auxiliary engine is also capable of propulsion.

Before the game begins, the Rojun writes on his hit record the starting location of his ship on the playing surface. If playing on the floor, he might write...3 feet south of North wall and 2 feet east of red chair, etc. The Rojun is invisible at the start of each game. Nothing marks his location until he makes himself visible for a first time. Each time he becomes visible, he shows a written record of how he moved—from his last written or observed location—and measures out the moves to determine his new location. He must become visible to shoot. Before using his transparenator to vanish, the 100 square matrix of one inch squares is centered over his ship counter. He can remain transparenated as long as he likes, during which time he can move one square per turn or one inch per turn, until off the matrix. Thereafter, his position is written on his hit sheet so that when he reappears, his new location can be verified and measured from the matrix. Each time the Rojun transparenates, its matrix is left in plain view to mark the last known position. After transparenating, the Rojun draws the movements of his ship from square 45-46-55 or 56 on his miniature hit record matrix. While transparenated, his ship is only one inch square, which is why the matrix is capable of showing his location while it is on the floor marking his last known location. He can move in any direction desired and into a different matrix square in each turn of play. During the turn in which he transparenated the Rojun was not entitled to move, and would therefore have to occupy one of the starting squares, 45-46-55 or 56.

Although he has the option to move one square in each turn of the game, he is not required to do so. After five turns of invisibility, it is possible for the Rojun to have moved off of the matrix card and across the playing surface at the rate of one inch per turn. The Rojun matrix must be recentered each time he becomes invisible.

TRANSPARENATORS

Six transparenation generators located in the shaded area with his sensors and life support systems enable the Rojun to become invisible whenever he wants. When only two or three generators are operational, there is a one turn delay before transparenation. If only one generator remains operating, it takes three turns to transparenate, during which time he may shoot or materialize his nuclear device. Once invisible, there is no limit to the number of turns the ship may remain hidden as long as at least one generator remains operational and as long as one unit of energy is fed into it each turn. One unit of energy must be sent to each operational transparenation generator during the turn in which he transparenates, but after transparenation, only one unit of energy is required to maintain the condition.

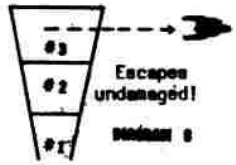
To fire, the Rojun must become visible. This is done after all ships have finished moving in step 2, but before special weapons already enroute are moved. After everyone has finished shooting, he may transparenate himself. In the following turn, he may begin moving toward a new location. The heading he takes to his next location is the direction he must face if becoming visible in the next turn. The Rojun can turn up to 90 degrees in each turn of play. If blazer fire, proton mine explosions, nuclear devices, javelin torpedoes, stalker pods or magma beams affect the numbered square or location in which the Rojun hides, damage results if his shields are unable to cope with the force. Without disclosing where he hides, the rojun rolls a die to see where his ship suffers damage. A 1-2 causes cabin damage, a 3-4 causes shaded area damage, and a 5-6 causes power supply damage. While transparenated, the Rojun is immune to tentacle beams. If tentacled by a Zark, the Rojun can escape by transparenation after one turn of being damaged, if he has enough power and equipment to survive the attack. Stalker pod enroute to his last visible location stop and hold position until he becomes visible again, if they were directed at him.

MAGMA INTENSIFIERS

The main Rojun weapon is his magma beam which is portrayed in the game by the four paper templates. Everything touched by the first three templates is destroyed. Ships touched by the fourth template suffer one point of damage if they have shields set at 6. If their shields were set at 4 or 5, they suffer two points of damage. If their shields were set at 1, 2 or 3, they suffer three points of damage. Ships with only 1 or no shields are destroyed. As the magma moves outward from its firing point, the affected area widens as illustrated below. Magma can be fired only every third turn, but remains effective for two consecutive turns. Template 1 is laid down at the edge of the ship counter and aligned with the shooting string angle. In the next turn of play, template 2 is laid next to 1. In the following turn, template 1 is removed from the surface and 3 is laid next to 2. Ships moving through the Magma may be destroyed or damaged. Since movement occurs before firing, the Rojun watches for ships flying through the next space to become affected by magma templates. A ship which flies through or into any portion of the next area to be hit by magma is affected. The ship movement during which template 3 was placed is illustrated in diagram A below. This ship is destroyed and the magma continues outward. The magma template must touch the actual lines of the ship drawing to destroy it. If only the ship counter is touched, one point of damage must be logged by a near miss effect provided at least one shield factor was in use. If no shield is in use, two factors of damage are caused. The victim chooses where to log near miss damage. A ship moving out of the area to be hit by magma will escape damage or destruction if it clears the affected area before the template is laid down. See diagram B for an illustration of this point.

The ship in diagram B started turn 3 in the area to be affected by template 3. He left during the turn in which the template was laid, thereby escaping damage. The magma beam cannot shield ships from the blast effect of other radiating weapons.

The Rojun has six magma intensifiers which enable him to fire a magma shot every third game turn. As hits on his cabin area occur, the resulting damage must be logged against his shields or magma intensifiers. Each time an intensifier is lost, it costs him an extra game turn to reload. When only one intensifier remains, it takes five turns to fire. He can remain invisible for five turns and then become visible to fire.



NUCLEAR DEVICE

The Rojun must make himself visible to fire the one nuclear device he carries. It must materialize between six and seven feet from the Rojun's position. The exact distance and bearing must be specified before laying off the angle or distance. Place a ruler, with its number 12 end at the point of explosion. The highest number readable before reaching the ship drawing is the number of factors of damage resulting. Subtract one damage point for each shield factor in use. The remaining number of damage points equals the number of turns the victim coasts on his last heading. A ship within three inches of an exploding nuclear device suffers ten units of damage. If it had six shield factors in use, the ship would coast for four turns on its last heading at continuing slowing velocities, just as if he had shut off his power. He cannot fire his weapons or change his course although his shields continue to function as he decelerates. He might even stop for several turns before resuming control. The number of factors getting through the shield must also be logged against operational systems on the ship. Magma cannot be fired in the same turn as the nuclear device, but it can be fired in the turn immediately before or after if sufficient power has been stored up. Power accumulated for magma blasts is never lost as long as one magma generator survives.

TYPESETTING DONE BY ROBIANNE VEST

HIT RECORD SHEET

Rux

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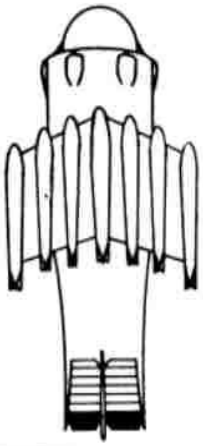

HITS

(cross off highest number as damage occurs or as torpedos are used)

MAIN ENGINE	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬ ⑭ ⑮
AUXILLARY ENGINE	① ② ③ Hits aft of the shaded area
BLAZER GENERATORS	① ② ③ ④ ⑤ ⑥
JAVELIN LAUNCHERS	① ② ③ ④ ⑤ ⑥ Hits in cabin area
DEFENSIVE SHIELD	① ② ③ ④
SENSORS *	① ② ③ ④ ⑤ ⑥ Hits in Shaded area
LIFE SUPPORT SYSTEM *	① ② ③ ④ ⑤
JAVELIN TORPEDOES *	① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫ ⑬ ⑭ ⑮ ⑯ ⑰ ⑱ ⑲ ⑳

*=Use one unit of energy to operate

1) Fill out all categories except Fire Angle and the strength of blazers and shields.
2) Move ships
3) Record blazer, shield and special weapons.
4) Fire weapons
5) Resolve fires
6) Revert to step 1. NOTE: Blazers and special weapons cannot fire in the same turn.

SPEED

WARP speed	① ② ③ ④ ⑤ ⑥ ⑦ +
ENERGY USED	① ② ③ ④ ⑥ ⑧ ⑩ ⑩

COURSE	COURSE ALTITUDE				FIRE ANGLE	FIRING ALTITUDE				TURN #		TOTAL ENERGY	LIFE SUPPORT SYSTEM *	SENSOR ENERGY *	COURSE CHANGE OR WARP ENERGY	JAVELIN ENERGY OR BLAZER ENERGY	SHIELD ENERGY	TOTAL ENERGY USED
	DIVE	CLIMB	HOLD			DIVE	CLIMB	HOLD										

RUX SPECIAL WEAPONS

In addition to the blazer, the Rux has six javelin torpedo launchers and twenty javelin torpedoes. Torpedoes cannot be fired in the same turn as blazers. You can use one or the other, but not both simultaneously.

Each javelin torpedo launcher takes one unit of energy to operate. You cannot launch more torpedoes than you have operational launchers in any one turn. Torpedoes can be launched on any heading, and each must have its own course to fly. During the launching turn, they each move one foot beyond your compass circle. On the second move they go two feet and move three feet on the third move and four on the fourth. Torpedoes move after all ship movement is completed but before anyone fires. If it appears likely that a torpedo will hit a ship, proportional movement of both is executed as described later. Torpedoes increase their velocity by one foot during each turn of their run out to their maximum range of ten feet. Torpedo damage occurs upon detonation or impact. If they are to explode before reaching the end of their ten foot run, the distance they run before detonation must be written prior to launching. Upon reaching the limit of the recorded distance, they explode. If no distance is specified, they explode at ten feet or on impact with something, whichever occurs first. Any ship drawing or portion thereof within one foot of the detonation point may be damaged. Parts of the counter not containing actual ship drawing do not count as being affected. Other torpedoes within the blast area detonate in a chain reaction and are assessed separately. The blast of torpedoes can be reduced by normal shields. Place a foot long ruler at the furthest tip of the torpedo, with the number 12 at the furthest tip of the torpedo. The highest number readable before reaching the ship drawing is the number of factors of damage resulting. Subtract one factor of damage for every operating shield factor. A ship within four inches of the explosion point suffers nine units of damage. If it has five shield factors in operation, the ship must lose four factors of the first portion of the ship touched by the radiating blast. Even though the ship may be long enough to have several smaller, less devastating numbers cross its hull, it must suffer the strongest degree of damage which first crosses its body.

When launching javelin torpedoes, the heading for each is stated and the shooting string is laid out on that angle. A small piece of masking tape is laid under the shooting string and a mark is made on the tape where the string crosses it. A second piece of tape is laid down at 8 or 10 inches from the first and again the tape is marked where the shooting string crosses it. A ten foot length of string is anchored to the floor just behind the first tape. The other end of this string could be temporarily tied to a staple, which fits into a hole in the center of the torpedo, or permanently taped to the rear of the torpedo. While the torpedo makes its second and subsequent moves, the alignment angle marks made on the strips of masking tape keep it on course and also identify the point from which the run was started so that the proper point of impact can be determined. The point of detonation is not revealed until it has been reached.

During the turn in which it appears likely that a torpedo will impact into an enemy ship drawing, proportional movement must be applied to see if collision occurs. Proportional moves work this way: If the torpedo was supposed to move three feet while the ship was moving warp 4, you'd divide the eight inches traversed by the ship into the 36 inches moved by the torpedo. Since eight does not divide evenly into 36, you find a number which divides into both 8 and 36. In this case, 4 would be appropriate and so would 2.

Each time the ship is moved 2 or 4 inches, the torpedo is moved 9 or 18 inches. To expedite determination, you could move the ship its 4 inches while moving the torpedo its 18 inches when it is obvious to all that collision is not going to occur during the first half of the move. Second and subsequent layoffs of both movements would require cutting back to 9 or 2, or even 4½ and 1 until both objects have completed movement or collided or missed. Remember that during the torpedo's fourth movement (which takes him from six feet to ten feet and detonation), he covers only four feet on the floor and must be calculated as having this velocity even though it was programmed to explode at 8 or 9 feet instead of 10. Your ship will not be damaged if an opponent happens to shoot one of your torpedoes during its launching turn because the torpedo ends its first move one foot from your compass circle, well clear of your ship drawing. To simplify play, the run of the torpedo can be measured form the edge of the ship counter instead of the edge of the compass circle.

Zark

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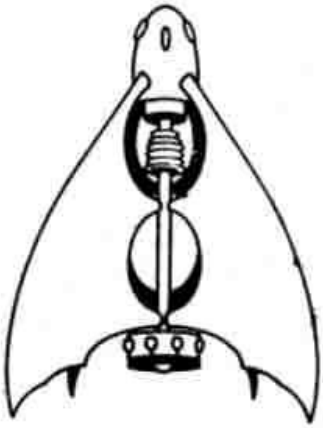

HITS

(Cross off high numbers as damage occurs to show power left)

	Hits aft of shaded area	Hits in cabin area	Hits in shaded area
MAIN ENGINE	①②③④⑤⑥⑦⑧⑨⑩⑪⑫⑬		
AUXILLARY ENGINE	① ⑫⑬⑭⑮		
BLAZER GENERATORS	①②③④⑤⑥		
NYTRON GENERATORS	①②③		
DEFENSIVE SHIELD	①②③		
SENSORS *	①②③④		
LIFE SUPPORT SYSTEMS*	①②③④⑤⑥		

*= Use one unit of energy to operate

SPEED

WARP speed	①②③④⑤⑥⑦⊕
ENERGY USED	①③⑤⑦⑨⑪⑬⑮

1) Fill out all categories except Fire Angle and the strength of blazers and shields.
2) Move ships
3) Record blazer, shield and special weapons.
4) Fire weapons
5) Resolve fires
6) Revert to step 1. NOTE: Blazers and special weapons cannot fire in the same turn.

COURSE	COURSE ALTITUDE				FIRING ANGLE	FIRING ALTITUDE			TURN #	TOTAL ENERGY	LIFE SUP-PORT ENERGY *	SENSOR ENERGY *	COURSE CHANGE OF WARP ENERGY	BLAZER ENERGY	NYTRON CUBE OF LANCE OF	SHIELD ENERGY	TOTAL EN-ERGY USED
	DIVE	CLIMB	HOLD			DIVE	CLIMB	HOLD									

ZARK SPECIAL WEAPONS

In addition to a blazer, the Zark has a Nytron generator which cannot be used when the blazer is functioning. Use one or the other, but not both at the same time.

Nytron can be used offensively or defensively. Defensively, you can encapsulate your own ship in a Nytron cube to provide yourself with a superior shielding. If you do so, your ship must coast on its last heading. You can form or break cubes during the special weapons portion of the move but cannot form and break a cube in the same turn of play. It takes one turn to form the cube, and another turn to break the cube. While breaking, the cube provides the same protection as when it is formed or forming. You cannot fire out of the cube while encapsulated, nor can you increase or maintain speed. Nytron cannot be raised around non-moving objects, so if you encapsulated an enemy ship, he will dissolve his cube during the turn in which he stops moving. The same thing happens to a cube you have raised over your own ship. Lack of movement dissolves all cubes. The encapsulating nytron cubes form around each ship on the line which portrays the compass circle. Non-moving items or ships cannot be encapsulated.

Offensively, your fire angle must hit some portion of the target ship to be encapsulated. If touched, the ship is instantly encapsulated and loses the right to fire. He can do nothing until his ship has coasted to a stop and the cube has dissolved. A tentacle beam can break this cube and it fully explained on the Repazoid special weapons sheets.

During the turn in which the cube is dissolving, he cannot fire out and no one can fire in. A ship which is moving warp 1 or 2 while reversing thrust has no real movement and cannot be encapsulated. If you encapsulated an enemy ship moving at warp 1, it loses the right to fire in that turn. In the following turn, his ship would remain in place and the cube would begin dissolving. In the turn after that, this ship could begin to move at warp 1 and could raise shields and fire weaponry. A Rux ship with javelin torpedoes on board is destroyed if encapsulated. The explosion is contained by the cube. If he has no torpedoes on board, the cube effects him like everyone else.

When encapsulated, only auxiliary engines may run. If none are operational, the captive ship's crew would die from lack of life support. The Rojun magma beam will destroy a nytron cube without touching the occupant, on its first turn of contact. The magma will have its normal effect on the uncovered ship if that ship remains in contact with magma for more than one turn.

When Nytron is used for encapsulation, it is called a cube. It can also be used in a Lance form, against which there is no possible shield, except a nytron cube. Neither of these forms can be used on targets beyond three feet. Nytron is created by three nytron generators. One generator can project Nytron out to one foot, it takes two generators to project nytron out to two feet, and three generators to project it out to three feet. One unit of energy is used by each operational generator. The amount of damage inflicted by a nytron lance is equal to the number of nytron generators powering that shot. When fighting a ship whose shields neutralize the effect of your most powerful blazer shots, you can always inflict a one, two or three factor damage upon him, regardless of shields, if you shoot him with your lance and he is within three feet. Attempting to use nytron on targets beyond three feet is a waste of time because three feet is your maximum range with nytron.

HIT RECORD SHEET

Zeron

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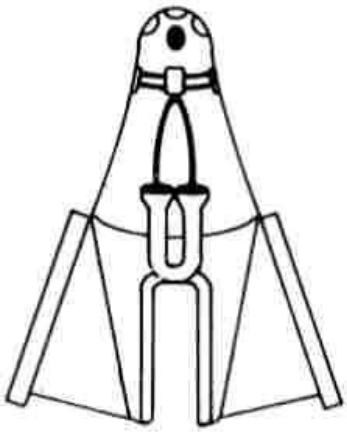

(Cross off highest number as damage occurs to show power left)

HITS

PORT ENGINE	①②③④⑤⑥⑦⑧⑨	Hits aft of shaded area
STARBOARD ENGINE	①②③④⑤⑥⑦⑧⑨	
AUXILLARY ENGINE	①②	
BLAZER ELECTRON POD	①②③④⑤⑥	Hits in cabin area
GENERATORS		
DEFENSIVE SHIELD	①②③④⑤	
SENSORS *	①②③④	Hits in shaded area
LIFE SUPPORT SYSTEM *	①②③④⑤⑥	

*=Use one unit of energy to operate

1) Fill out all categories except Fire Angle and the strength of blazers and shields.
2) Move ships
3) Record blazer, shield and special weapons
4) Fire weapons
5) Resolve fires
6) Revert to step 1. NOTE: Blazers and special weapons cannot fire in the same turn.

SPEED

WARP speed	① ② ③ ④ ⑤ ⑥ ⑦ ⊕
ENERGY spent	① ② ③ ④ ⑤ ⑦ ⑧ ⑨

COURSE	COURSE ALTITUDE				FIRE ANGLE	FIRING ALTITUDE				TURN #		TOTAL ENERGY	LIFE SUP-PORT ENERGY *	SENSOR ENERGY *	COURSE CHANGE OR WARP ENERGY	ELECTRON POD ENERGY OR BLAZER ENERGY	SHIELD ENERGY	TOTAL EN-ERGY USED
	DIVE	CLIMB	HOLD			DIVE	CLIMB	HOLD										

ZERON SPECIAL WEAPONS

The Zeron special weapon is an electron stalker pod. These are the circular shapes on the red counter sheet. The number in the center of each pod shows the speed at which it moves in each turn of play. The number of black dots pictured show the amount of damage these pods cause when they ram their victims or something which gets between them and the target they've been chasing. One factor of damage for each black dot is inflicted. The pod has unerring homing capabilities and must be launched within four feet of its target. The pod which carries only one unit of destruction moves at warp 7 toward its target. It moves at this speed every turn of the game while trying to fly the most direct route to the target. It can be prematurely destroyed by blazer fire, and other forms of weaponry described on the weaponry cross index chart on the back of this booklet.

The Zeron is impervious to the blast of a prematurely detonated pod and never suffers damage from it. Even though the target against which these pods are launched moves faster than the pod or beyond the four foot initial launch distance, they continue to follow throughout the game until catching their prey or destroyed. After all ship movement stops but before anyone fires, the pods are moved on the most direct course towards their target regardless of how much distance separates them. If a pod hits any ship while enroute, it detonates with a one foot blast radius. When playing with altitude in the game, you can assume that the pod has vertical separation from anything it touches while pursuing its prey. If any other type of weaponry effect touches the pod, it explodes with a double effect and double range and this includes one pod's explosion setting off another nearby pod. Normal shields can modify the amount of damage suffered. Nytron hits will triple the pod's burst radius and blast effect. The Rojun may not be tracked by pods while it is transparenated. The pod moves toward him while he is visible. It stops moving if the Rojun becomes invisible and becomes a contact mine. It would also become a contact mine with no movement if its original target were destroyed before the pod could reach it.

Regardless of the power packaged into the electron stalker pod, the Zeron cannot launch more than one pod per turn and cannot fire his blazers while making and launching pods. One unit of energy is spent for each electron damage point packed within the pod. Pods are created from the Blazer generator, so if the Blazer generators are destroyed, no more pods can be created.

ELECTRON STALKER POD

This particular sample pod moves at warp 3 every turn in the game and carries five factors of destructive power.

If the ship drawing is touched

Ships with no sheild or one shield factor touched
Ships with 2 or 3 shields in use,,touched by this
Ships with 4 or 5 shields in use, touched by this
Ships with 6 shields in use, suffer only 1 point c

MAGMA TEMPLATE # 4

If only the ship counter (not the actual ship c
touched, one factor of damage is caused if one
shields are in use. Two factors of damage are
if no shields are in use.

All ship drawings touched by this templ
If only the ship counter is touched, or
is caused if one or more shields are in
of damage are caused if no shields are

MAGMA TEMPLATES: Cut out and mour

All ship drawings touched by this template are destroyed.
If only the ship counter is touched, one factor of damage
is caused if one or more shields are in use. Two factors
of damage are caused if no shields are in use.

MAGMA TEMPLATE # 2

s touched...

r touched by this template are destroyed.
d by this template suffer 3 point damage.
d by this template suffer 2 point damage.
1 point damage.

ual ship drawing) is
sed if one or more
damage are caused

this templade are destroyed.
touched, one factor of damage
elds are in use. Two factors
hields are in use.

MAGMA TEMPLATE # 3

and mount on cardboard.

Align shooting string with this dashed line.

MAGMA TEMPLATE # 4

WEAPONRY CROSS INDEX CHART

N/A Means 'No Affect'...It Can't Possibly Happen. For Example, A Blazer Beam Cannot Shoot the Nytron Lance Beam and Visa Versa.

Attack → / Defend ↓	BLAZER	NYTRON LANCE	TENTICAL BEAM	GAPPER ZAPPER	NUCLEAR WEAPON	MAGMA BEAM	PROTON MINE	PROTON TORPEDO	Impact And/Or JAVELIN TORPEDO
BLAZER	N/A	N/A	If source anticipated Blazer does not fire.	N/A	N/A	No effect; both continue	Mine explodes	N/A	Torpedo explodes
NORMAL DEFENSIVE SHIELDS	Varies with shield strength	Shields provide no protection	Shields provide no protection	Shields provide no protection	Varies with shield strength	Shields provide Some protection	Shields protect against mines	Varies with shield strength	Varies with shield strength
NYTRON CUBE	Blazer no effect	Cancel each other out for that turn.	Nytron destroyed; no defense this turn.	GZ stopped by Nytron Cube.	Nuclear weapon nullified	Nytron destroyed, Magma Beam continues	Mine explodes; no effect on Nytron Cube	Torpedo explodes; no effect on Nytron Cube	Torpedo explodes; no effect on Nytron Cube
TENTICAL BEAM	No effect; blazer fire stopped if source was anticipated	Nytron cancelled out Blazer must fire.	Cancel each other out.	1-3-5, GZ damaged; 2-4-6, TB damaged	N/A	Magma Beam continues; tentical grip broken	Mine explodes	N/A	TB user may set Torpedo on new course.
GAPPER ZAPPER	Both weapons effective	Both weapons effective	1-3-5, GZ damaged; 2-4-6, TB damaged.	Cancel each other out	N/A	N/A	Mine explodes if touched by both rays	N/A	Torpedo explodes if touched by both rays.
MAGMA BEAM	No effect both continue	No effect; Magma Beam continues	No effect on Magma Beam	No effect; Magma Beam continues	Weapon explodes; no effect on Magma	Both beams regenerate follow original with #1 templates	Mine explodes; no effect on Magma Beam	Torpedo destroyed	Torpedo explodes; no effect on Magma
PROTON MINE	Mine explodes, Blazer beam ends	Mine explodes, Nytron Lance ends	Mine explodes	Mine explodes if both rays touch it	Both explode, normal effects	Mine explodes, no effect on Magma	Both explode with normal effects.	Mine explodes with normal effects, torpedo ends	Both explode with normal effects.
PROTON TORPEDO	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Torpedo explodes with normal effects.
Impact And/Or JAVELIN TORPEDO	Torpedo explodes, Blazer beam ends.	Torpedo explodes; Nytron Lance ends	TB user may set Torpedo on new course	Torpedo explodes if both rays touch it.	Both explode, normal effects	Torpedo destroyed, Magma Beam continues	Both explode, normal effects	Torpedo explodes with normal effects	Both explode with normal effects.

NOTE: ELECTRON TRACKER PODS always detonate whenever any weapon is fired or used against them. Such explosions are at double range and double damage effect. Exceptions: The Nytron Lance detonates them at triple range and damage effect. Two pods colliding with each other destroy themselves with no blast effect.

NOTE: Nuclear weapons can never be used in any defensive configuration. They are totally offensive weapons.