

FULL THRUST

FLEET ACTIONS IN DEEP SPACE



JON M. TUFFLEY

SECOND EDITION



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TO: NAVFLTCOM, CONFEDERATION
NAVAL COMMAND, FREYA HIBASE.

FROM: CNS FURIOUS (EC-140)

ASSIGNED: NAGISA SYSTEM

MESSAGE BEGINS.....

This is Captain Alexander van der Meij, commanding Escort Cruiser CNS Furious. At 13:04:131:45 GST, one of our far-orbit sensors detected emergence diffusion effects characteristic of a large task force of naval units dropping out of FTL drive on the limits of the Nagisa system. All attempts to communicate with the intruders have proved negative and there is no response to IFF; given the current state of relations with the Eurasian Solar Union we have no option but to classify the unknowns as hostiles and take appropriate measures to defend the colony.

To this end I have ordered the Corvettes, CNS Vampire (C-351) and CNS Venom (C-322), to assume low orbit around the colony to provide final defence, while Furious and our accompanying Destroyer CNS Zumwalt (D-204) proceed to engage the enemy units. The Lancer CNS Hermes (L-173) has been ordered to make all speed out of system to Freya with this message, plus all accompanying sensor downloads.

Latest long-range scan intelligence indicates a minimum of twelve hostiles inbound, with probability 96.4% of at least two Capital units. Three more contacts are exhibiting signatures of heavy transport craft, we can only assume this to be a landing force. Our duty, therefore, is to attempt to inflict as much damage on this taskforce as possible before they reach planetary orbit. TacComp predictions on the survival chances of Furious and Zumwalt in optimum attack pattern are approximately 2.4% and 1.7% respectively; accordingly we expect this to be our last transmission. Estimated time to firm sensor contact 2.1 hours, time to engagement estimated at 2.8 hours. We are proceeding to engage at full thrust. May God be with us.

MESSAGE ENDS.....

SENSOR DOWNLOAD FOLLOWS.....

INTRODUCTION AND DESIGNER'S NOTES:

Way back in the early seventies, Skytrex Ltd. released their first resin-cast spaceship models suitable for gaming, along with a simple set of rules for space combat. After amassing two fleets of these little starships, I soon decided that the rules were not quite what I wanted, so I set about writing a one-page system of my own. Since then that original system has evolved (mutated?) through many versions and guises, culminating in the publication, in 1991, of the First Edition of FULL THRUST.

The reaction to the First Edition was so overwhelming that it seemed an obvious step to re-issue the game in a much improved format, making it accessible to many more gamers through full trade distribution. I hope you will enjoy this Second Edition as much as many hundreds of purchasers have the original booklet.

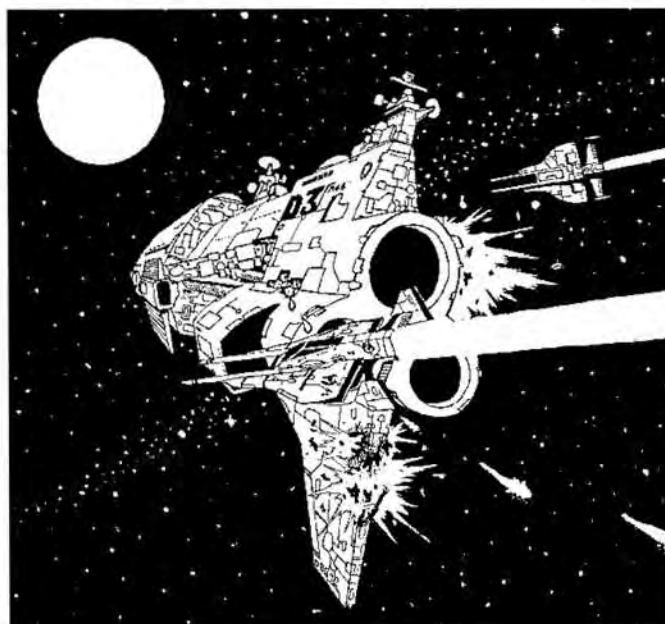
In compiling this Second Edition I have tried hard to remain true to the original premise of the game: this is NOT a 'super-realistic' simulation that takes hours to make a single move. It is a system for fast, fun games with fairly large numbers of ships (a dozen or more per side is no problem), which can be played in a reasonable length of time. No longer will you have to end a game after three turns because it is closing time – with FULL THRUST you can hammer the Enemy (maybe even twice!) and still get that pint in before last orders!

The actual rules are divided into the CORE rules – the basic mechanisms of play – and the ADVANCED rules which add much more detail to the game. The Core rules on their own will give a VERY simple, fast game with absolutely no complications, even when using big fleets. Once you are familiar with the basics, the various parts of the Advanced rules may be added, either all at once or piecemeal as desired. Pick and choose which of the Advanced rules you wish to use – they are ALL effectively 'optional', but just remember to agree with your opponent which ones are in play and which are not!

Players familiar with the First Edition of FULL THRUST will notice just a few differences in the Core system; probably the most immediately obvious is that NO ship classes are permitted to fire ANY weapons (except close-in defences) through their AFT quadrant. This was a 'bright idea' thrown into a playtest session, which has a profound effect on tactics and positional play – it worked so well that it was decided to include it here.

The Basic Ship Classes have also seen considerable revision, to bring them into line with the new ship design rules; the classes in the First Edition were fairly 'arbitrary' in their design, particularly in regard to weapon fit and damage points. The revisions made here should improve play balance considerably.

Above all, FULL THRUST is intended to be an ENJOYABLE game – if you are not happy with a rule or system, throw it out and use your own – that is what SF gaming is (or should be) all about!!!





SHIP MODELS AND OTHER PLAYING PIECES:

As this is primarily a miniatures game, we obviously recommend that it is played with actual starship models; full details on obtaining, converting and scratchbuilding suitable models are given in the appendices.

If you do not wish to use model ships, the game will also run perfectly well using card or plastic counters to represent ships; all you need is some identification mark or code on each counter, a mark to indicate the centre of the counter (for range measurement etc.) and something to show the facing (ie: present direction) of the ship.

We have actually supplied enough copy-and-cut-out counters in the back of the book to enable you to play out the Introductory Scenario in the Core rules; hopefully this will get you sufficiently 'hooked' on the system to start collecting your own fleets of models!

In addition to the actual ships, there are a number of other items that can be represented either by counters or models (depending on your time, resources and the overall visual impression you are aiming for). These include Asteroids, Fighter Groups, 'Bogeys' (unidentified sensor contacts) etc. – suggestions on how to model these are to be found in the appendices.

DICE:

To play FULL THRUST, you need a number of 'normal' (6-sided) dice, referred to in the rules as 'D6'. Just a couple of dice will do, but a half-dozen or more will be useful when firing lots of weaponry at once.

Very occasionally, the rules call for the generation of a number between 1 and 12, usually when a direction needs to be randomly chosen from the 12 points of the Course Gauge. Most players will probably have a twelve-sided die ('D12') available to use, but if you do not then simply roll a D6 twice: if the first roll is 1 to 3, read the second roll normally (ie: as 1 to 6) – if the first roll is 4 to 6, then add 6 to the second roll (ie: read it as 7 to 12). Do NOT roll 2D6 and add the scores together, as this does not give an even chance of getting each result!

OTHER EQUIPMENT FOR PLAY:

You will need a tape-measure or long ruler, graduated in whatever units you are using for play (eg: inches or centimetres); a ruler or straight-edge can also be useful for checking lines of fire etc.

A number of coloured counters are useful for marking points on the table; simple card counters may be used, or packs of 'tiddlywink' type plastic counters may be purchased very cheaply from toy or game shops.

The Course and Arc-of-Fire Gauge printed at the back of this book may be photocopied, cut out and stuck to a piece of thick card, or a more elaborate version may be constructed as players desire (eg: from clear plastic sheet or similar). While this template is not essential to play, it does make the moving of ships much easier and more accurate, and should also save any arguments about fire arcs!

Photocopy the Ship Record Sheet and fill in the details of your ships; if you wish you can then put the sheets in clear plastic document wallets and write orders and damage in Chinagraph pencil, so the sheets can be re-used.

Other than these few items, all you need is a good imagination and a couple of six-packs, and you're off into deepest space, To Boldly Go, etc..

PLAYING AREA:

One of the great advantages of starship combat games is that you do not need any 'terrain'! You can use any suitable flat area for the game, such as a tabletop or even the floor (pets, small siblings and vacuum cleaners notwithstanding..)

If you want maximum visual appeal, obtain a large piece of black cloth, paper or card to cover the playing area and speckle it with varying-size dots of white and yellow paint. The 'starfield' used in the photos was produced in about half an hour on a piece of black mounting board; as you can see, it looks surprisingly effective.

UNITS OF DISTANCE:

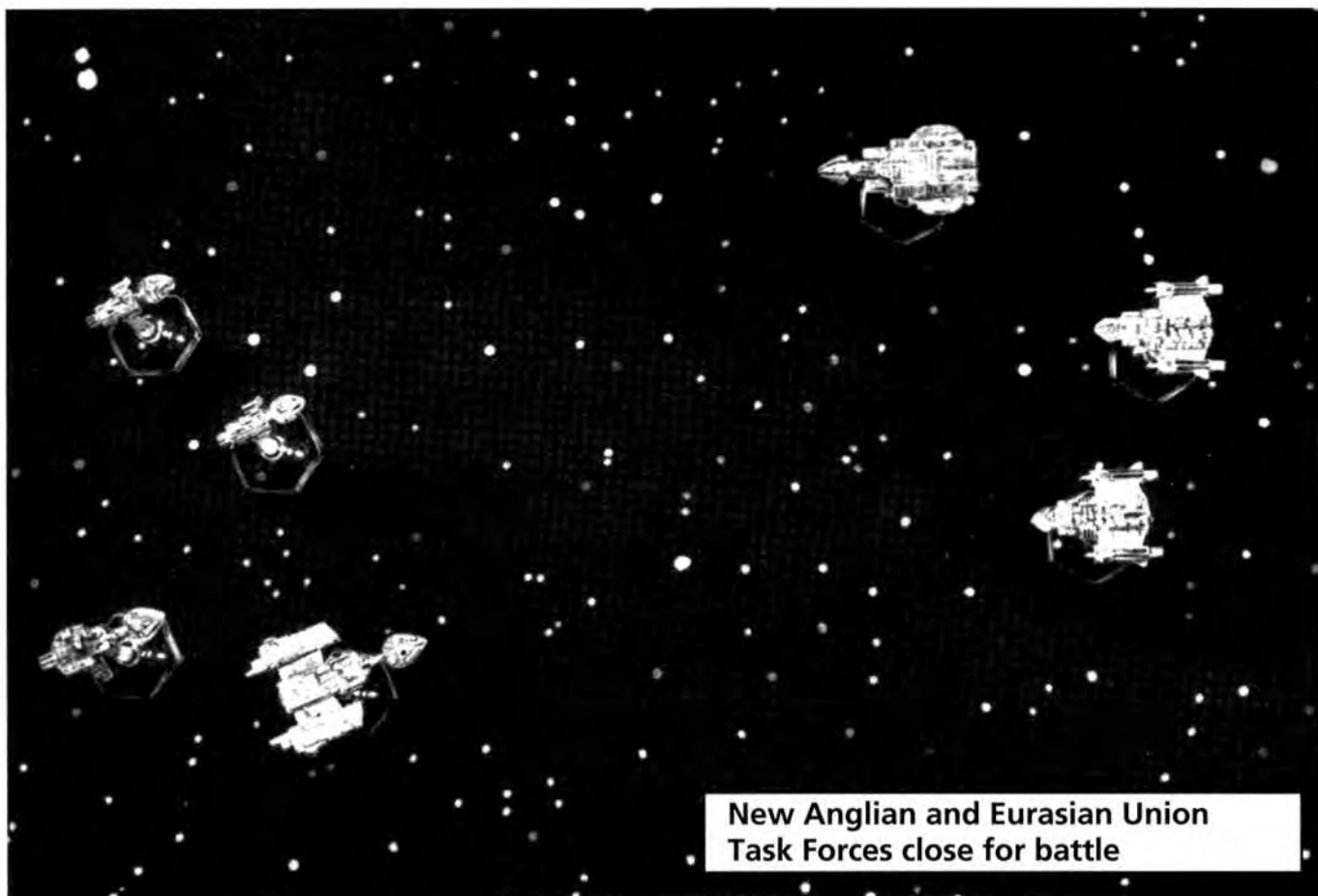
Throughout these rules we have used inches as the basic unit of measurement, as this seems to work best on an average-sized table (say around 4' x 6' or a bit larger). If you wish to use an area that is significantly smaller or larger than this, then simply change the unit of measurement: for a very small play area use centimetres as the basic unit (just convert 1" to 1cm). If you have a huge area available then you can expand the units accordingly – try using units of 3" (or perhaps 10cm) if playing on a large floor area (for example a distance in the rules of 12" would be a 1.2 metres if using 10cm units); if you have a whole sports hall to use, then why not try using giant ship models and 1 foot (or even 1 metre) units?!

SEQUENCE OF PLAY:

The game is played as a series of GAME TURNS, each Turn consisting of both (or all) players having the opportunity to move and fire their ships.

Each Game Turn starts with both players simultaneously (and secretly) writing the MOVEMENT ORDERS for all the ships they own, using the spaces on the lower portion of the Ship Record Sheets. Once all orders for that Turn have been completed, any Asteroids or similar objects (such as Installations or Starbases) that may be in play are moved if necessary, in accordance with the rules given for such objects.

Now each player must move all of his ships, in strict accordance with the orders he has written for them;



both/all players may perform this action simultaneously to speed up play.

If only one player has Fighter Groups deployed on the table, he may now move any or all of these in accordance with the rules governing Fighter movement; if two or more players are currently using Fighters, they should each move one group alternately (starting with the player that has the most groups on-table) until all desired Fighter movement is completed.

This completes the MOVEMENT portion of the Game Turn, and no ships or other objects may be moved after this time.

Players now proceed with the FIRING section of the Turn; starting with the player having the most individual ships in play at the time (or by rolling a D6 each to determine the first player, should forces be exactly equal), each player takes turn at choosing ONE of his ships and firing any or all of its weapons as desired, including firing Point-Defence weapons at any Fighter Groups that are attacking the ship which is currently being 'fired'. As soon as all desired firing from that one ship is completed, any Fighters that are attacking that ship may make their attacks.

When damage is inflicted on an enemy by weapons fire, the effects of that damage are applied and recorded immediately (including Systems Damage checks caused by a ship reaching a Threshold Point on its Damage Track – see page 10-11).

Note that when a ship is selected to be fired, the player should announce the targets for all the fire he intends to carry out with that ship, BEFORE any dice are rolled for fire effects; for example: 'I am firing both 'A' Batteries at the Heavy Cruiser in my Fore arc, and the 'B' Battery at the Frigate to Starboard, plus both PDAF's at the attacking Fighters'. This prevents the player from (in this example) rolling for the effect of his shots on the Cruiser, then deciding to fire the 'B' Battery at the Cruiser as well – instead of at the Frigate – in the hope of maybe crippling the Cruiser. This is not permissible, as all the fire from any one ship is assumed to be more-or-less simultaneous.

A single TARGET ship may, of course, be fired on more than once in the Turn, by different attackers.

The opposing player now chooses one of his ships and follows the same firing procedure; this alternates between players until neither desires to fire any more ships, or all ships on the table have been fired. If players have fleets of unequal sizes, the player with the most ships may fire any remaining ones after his opponent announces that he has fired HIS last ship.

Finally, any remaining Fighter Groups that have not yet fired may make their attacks (this may occur if a group is attacking a ship without any Anti-Fighter systems, which has not fired any other weaponry at all in the turn).



NOTE: AFTER A SHIP HAS FIRED SOME OR ALL OF ITS WEAPONRY AND PLAY HAS MOVED ON TO ANOTHER SHIP, THE FIRST SHIP MAY **NOT** FIRE ANY OTHER WEAPONS OR MAKE **ANY** FURTHER ACTIONS IN THAT GAME TURN.

Note also that ships firing Area-Defence Anti-Fighter weaponry at Fighters attacking a different ship (as opposed to using either ADAF or PDAF in self-defence) will treat such fire as part of their normal firing turn; the Fighter Group fired on in this way does NOT get to immediately attack its target, but must wait until the actual target ship takes its own firing turn.

To summarise the TURN SEQUENCE:

- 1) WRITE MOVEMENT ORDERS.
- 2) MOVE ASTEROIDS AND OTHER FIXED-MOVE BODIES (if applicable).
- 3) MOVE ALL SHIPS IN ACCORDANCE WITH WRITTEN ORDERS.
- 4) MOVE ANY/ALL FIGHTER GROUPS.
- 5) FIRE ANY/ALL SHIPS, PLAYERS ALTERNATING ONE SHIP EACH.
- 6) MAKE ANY REMAINING UNUSED FIGHTER ATTACKS.

Play then proceeds with the next Game Turn.

SHIP GROUPS AND CLASSES:

Combat starships are divided into three broad GROUPS: ESCORTS, CRUISERS and CAPITAL SHIPS.

ESCORTS: These are the smaller ship classes, ranging from the tiny Couriers through Corvettes and Frigates, up to Destroyer class ships. Although sometimes used on detached duty in low-threat areas, on patrol missions and courier duties, Escorts are more normally used to support heavier ships of Cruiser or Capital ratings.

Ships of the Escort group are generally very manoeuvrable, but lightly armed and armoured; they are effective against their own kind, but of relatively little use against heavier ship units.

CRUISERS: The medium-sized warships, used to support the heavy Line-of-Battle ships but also capable of holding their own on independent operations. Cruisers are divided into Light, Escort and Heavy Cruiser classes; they are reasonably agile and well-protected and mount heavier weaponry than the small Escorts.

CAPITAL SHIPS: The heavy Line-of-Battle classes, from Battlecruisers and Battleships up to the vast Superdreadnoughts and Fleet Carriers. These ships are ponderous leviathans, bristling with heavy weaponry and solidly armoured against attack. Capital units form the core of a Battlefleet or Task Force and many carry their own onboard Fighter Groups as both an offensive and defensive weapon.

SPECIAL NOTE: to avoid any possible confusion over ship classifications, please note that an 'Escort Cruiser' is a Cruiser, not an Escort – its designation simply indicates that its primary function is that of supporting Capital units rather than independent action. Similarly, a 'Battlecruiser' is NOT a Cruiser, but is classed as a Capital Ship – it is, in effect, a slightly cheaper and lighter armed version of a Battleship.

COURSE DETERMINATION:

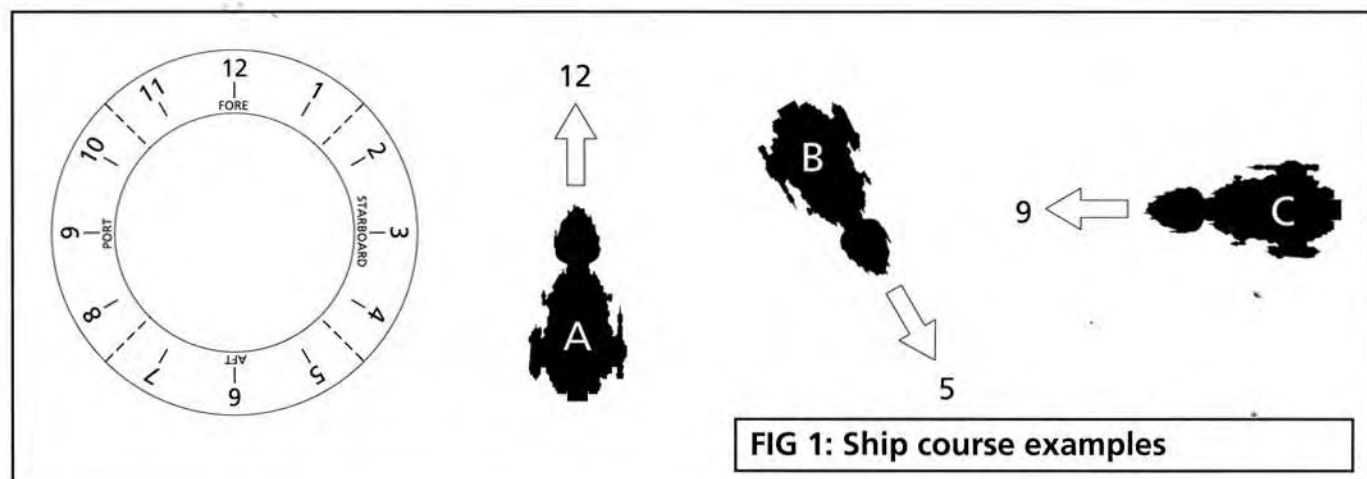
A ship may move on one of twelve COURSES, which are defined by using a 'clock-face' method: at the start of the game, decide which direction represents COURSE 12 – usually towards one edge of the play area is convenient – and then work out each COURSE from this reference point.

EXAMPLE:

In Figure 1, below, course 12 is defined as directly towards the table edge shown; so Ship A is travelling on COURSE 12, Ship B is on COURSE 5 and Ship C is on COURSE 9.

SHIP VELOCITY:

The current VELOCITY of a ship is defined as the number of INCHES (or other Movement Units) that the ship will move in that current Game Turn. A ship travelling at VELOCITY 8 will move 8 inches in that Game Turn, provided it does not apply any thrust to alter that velocity.



SHIPS **MUST** ALWAYS MOVE THE FULL DISTANCE SPECIFIED BY THEIR CURRENT VELOCITY, UNLESS THE VELOCITY IS ALTERED BY APPLYING THRUST.

THRUST RATINGS:

Each ship has a THRUST RATING, which is a measure of the output of its Drive systems relative to the MASS of the ship. This available THRUST is used to alter the ship's COURSE and/or VELOCITY as desired, in accordance with the Movement Orders plotted for the ship at the start of the Game Turn.

The THRUST RATING of a given ship is the TOTAL maximum amount of Thrust that may be applied in any one Game Turn. In one Turn, ANY OR ALL of the available Thrust may be used to change the ship's VELOCITY (up or down, to accelerate or decelerate the ship), but only up to HALF the THRUST RATING may be applied to COURSE CHANGING; in other words, a ship with a THRUST RATING of 4 could accelerate or decelerate by up to 4" per Game Turn, or could apply up to 2 points of Thrust to Course changes and still be able to make a 2" change to velocity in the same turn. The ship CANNOT however, apply MORE than 2 of its available Thrust points to changing Course.

(Note: if the ship has an ODD number of Thrust points available, the portion that may be expended on Course changing is rounded UP, eg: a ship with Thrust Rating of 5 could alter Course up to 3 points per Game Turn.)

EACH POINT OF THRUST APPLIED TO COURSE CHANGES WILL ALTER THE SHIP'S COURSE BY ONE COURSE NUMBER DURING THE GAME TURN.

EXAMPLE:

A ship with Thrust Rating of 6 decides to apply 3 points (its available maximum) to altering Course. The ship is currently travelling on Course 10; if it is to turn to Port it will turn ANTICLOCKWISE, ending up on Course 7. Should the turn be made to STARBOARD (CLOCKWISE), the final Course will be 1.

MOVEMENT:

The movement of a ship in any given Game Turn is defined by two factors: the ship's COURSE and VELOCITY. The current COURSE indicates the direction in which the ship will move, and the VELOCITY shows how far it will move along that course.

Ships obey one of the basic Laws of Motion, in that once they are moving in a particular direction they will continue to move in the same direction and at the same speed until they apply THRUST to alter Course and/or velocity.

This means there is effectively NO MAXIMUM SPEED for any ship – theoretically it can continue to accelerate each Game Turn if the player so wishes, and will maintain whatever velocity it reaches until it applies more (reverse) Thrust to decelerate again. At higher velocities, however, a ship may not be able to manoeuvre quickly enough to remain on the playing area, so think carefully before going TOO fast!

MAKING COURSE CHANGES:

A ship making a Course change is assumed to be applying a sideways Thrust vector throughout the movement in that Game Turn, and would therefore move in a curved path, ending up the turn pointing towards its new Course.

To simulate this when moving the ship model, HALF of the Course change is made at the START of the ship's movement and the remaining half at the MID-POINT of the move. If the total Course change is an ODD number, then round DOWN the initial part of the change and round UP the mid-move part.

Example A: The ship in Figure 2, below, is currently moving on Course 3 at a velocity of 10. The player decides to alter the ship's Course to 12, by turning 3 points to Port. At the start of its movement, the ship is turned ONE point to Port (half the total Course change, rounded DOWN) bringing it to Course 2. It is then moved HALF its velocity – 5" – along Course 2, then turned again through TWO Course points, bringing it round to Course 12 as intended. Finally, the ship completes its movement by travelling its remaining 5" along Course 12.

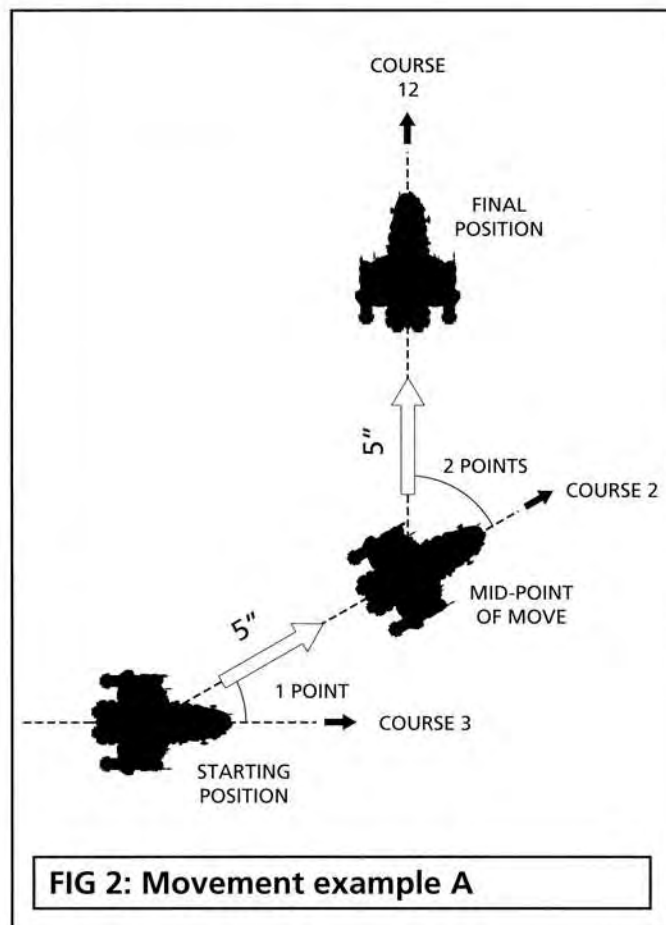
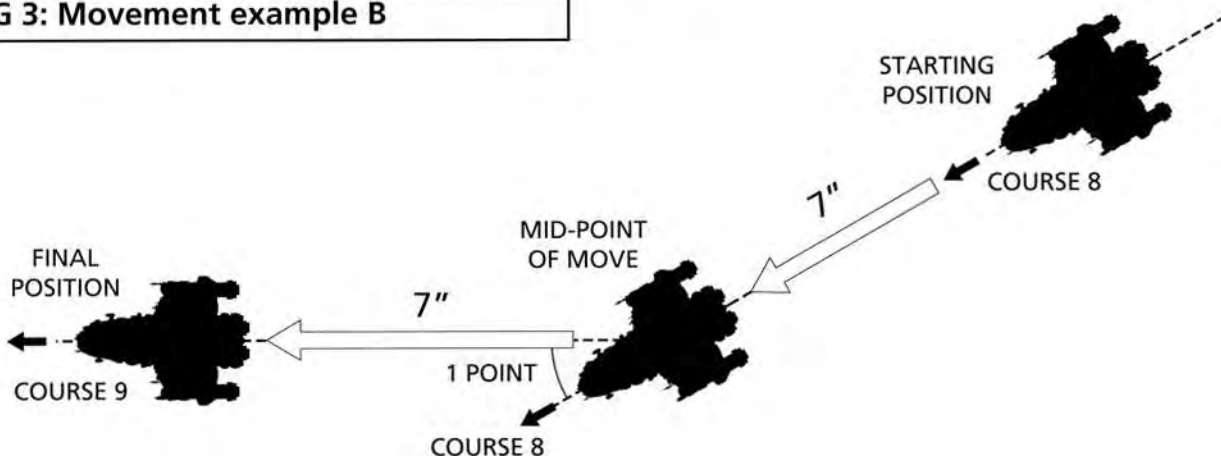


FIG 2: Movement example A

Example B: A ship is moving on Course 8 at a velocity of 14, and is to make a one-point turn to Starboard to bring it on to Course 9. At the start of its movement the ship does NOT alter Course (half of one being rounded down to zero); it moves half its distance (7") along Course 8. Now the ship makes its one point of turn to Course 9, and then moves the remaining 7".



FIG 3: Movement example B



MOVEMENT ORDERS:

The Ship Record Sheets have a series of boxes for writing each turn's Movement Orders for each ship. At the start of the Turn, each player must write orders for each of his ships that he wishes to apply Thrust to; if he wishes the ship simply to move ahead at its current speed, no orders are necessary (any ship with no orders will move straight ahead at unchanged speed, as will any that are given impossible orders – ones that exceed the ship's Thrust Rating).

The actual orders are written in short notation, giving Course change (if any) and direction (Port or Starboard), plus any acceleration (as a +) or deceleration (as a -). The new final velocity is then written in the small box after the order box, as reference for next turn. eg: an order of P2 + 4 would indicate a two-point turn to Port (P), plus acceleration of 4". If (say) the ship had been travelling at velocity 8 last turn, the new total velocity of 12 (8 + 4) would be written in the velocity box to give the starting velocity for the next move.

SPECIAL NOTES ON MOVEMENT:

Ships may NOT have negative velocities, ie: they may NOT move backwards; to retrace its course, a ship must be turned around.

A ship with a velocity of zero (ie: stationary) may, in its movement phase, be rotated on the spot to any desired Course, irrespective of available Thrust or normal limitations on Course changes. The ship may NOT make any actual movement or apply any other Thrust in that Game Turn.

FIRE CONTROL SYSTEMS:

The Fire Control Systems ('FireCons') of a ship are some of its most important fittings: each FireCon represents a suite of sensor systems and computer facilities to direct the fire of the ship's offensive weaponry – without these ships are

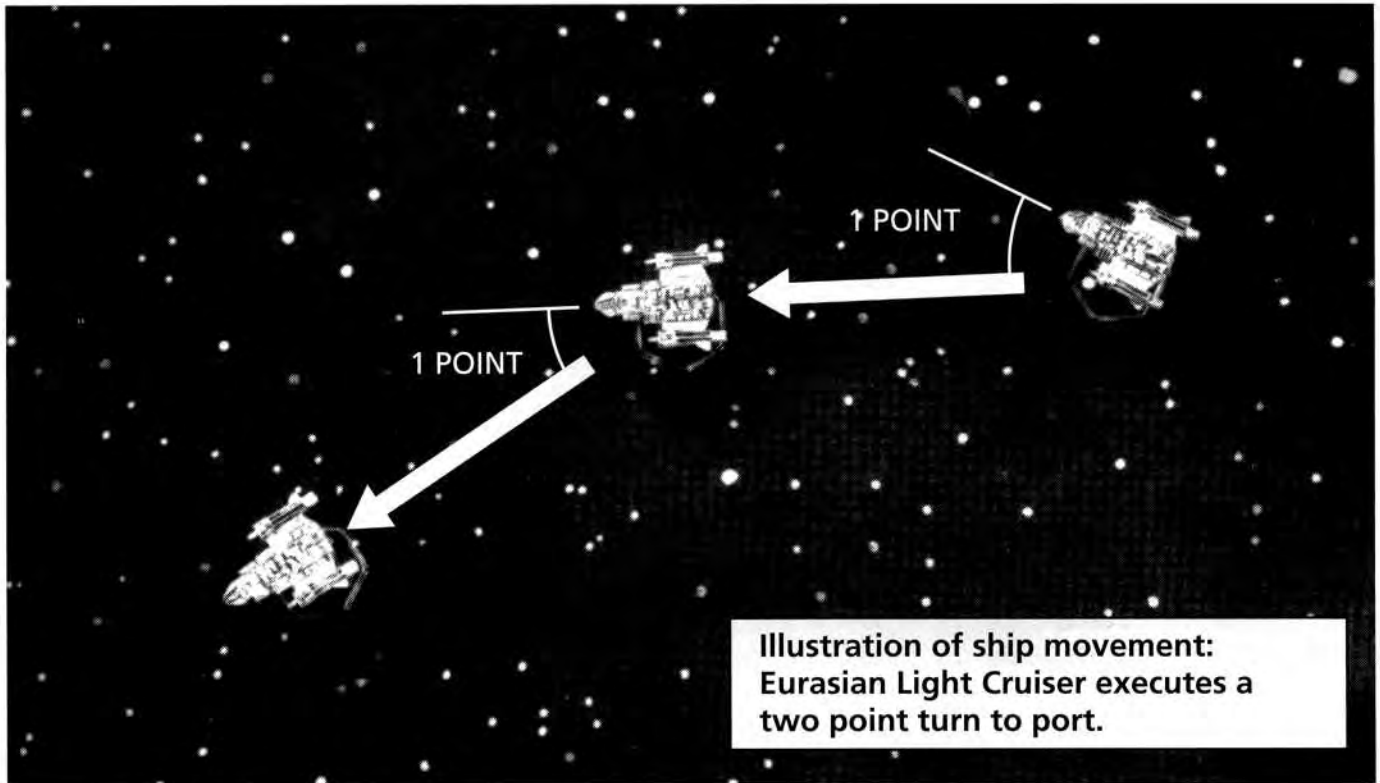
unable to locate and track the enemy with the precision required to fire at it.

Each FireCon system permits the ship to engage ONE target during the firing portion of a turn. Thus if a ship has TWO FireCon systems operational it can split its fire between two separate targets in one turn if desired; these targets may be in the same or different fire arcs, and fire from the ship's various Batteries may be divided in any way between the targets (depending on the arcs through which each Battery may bear, of course). NOTE that no SINGLE Battery may split its dice roll between targets in any circumstances – ie: an 'A' Battery at close range MUST roll all three dice against the same target ship, though two SEPARATE 'A' Batteries may each engage a separate target, provided of course that two FireCon systems are available!

In general, ESCORT classes each carry a SINGLE FireCon as standard, CRUISERS have TWO systems and CAPITAL SHIPS have THREE (these standard fittings are already marked on the Ship Record Sheets using the symbols for the systems); MERCHANT ships have a single system. If players wish, they may purchase additional FireCon systems for their ships, at the MASS and Points Costs given in the Ship Design rules: The only limitation to the number of FireCons that may be placed on a ship is the available MASS and the cost of them – you may use as many as you can afford, but will be sacrificing firepower and other systems to make room for them. There is little point in having more FireCon systems than you have weapons to use them with!!

Individual FireCon systems are NOT specifically linked to individual Weapons or Batteries; if a Cruiser loses one of its FireCons, the remaining one may still be used to fire any or all of the ship's weaponry, but only at one target per Turn.

NEEDLE BEAMS, if they are used, (see page 18) are a special case regarding Fire Control. Each individual shot with a Needle Beam requires the use of a FireCon system, even if several Beams are being fired at the SAME TARGET SHIP. The exception to this is if two or more Needles are



being fired at just one specific SYSTEM on the target, when one FireCon may be used for both shots.

EXAMPLE:

If a ship is equipped with three Needle Beams and decides to fire TWO of them at a target's Drive system, and the third at the same target's 'A' Battery, it would need to employ TWO Fire Control systems in the turn to make these shots (one for each target system on the target ship). FireCons that are being used for directing Needle Beam attacks may NOT be used to fire any other weaponry that turn, even at the same target ship.

Please note that DEFENSIVE weapons, ie: PDAF and ADAF systems, are assumed to have their own dedicated Fire Control equipment built-in; they do NOT require the use of the ship's main FireCon systems in order to engage Fighter Groups.

FIRE ARCS:

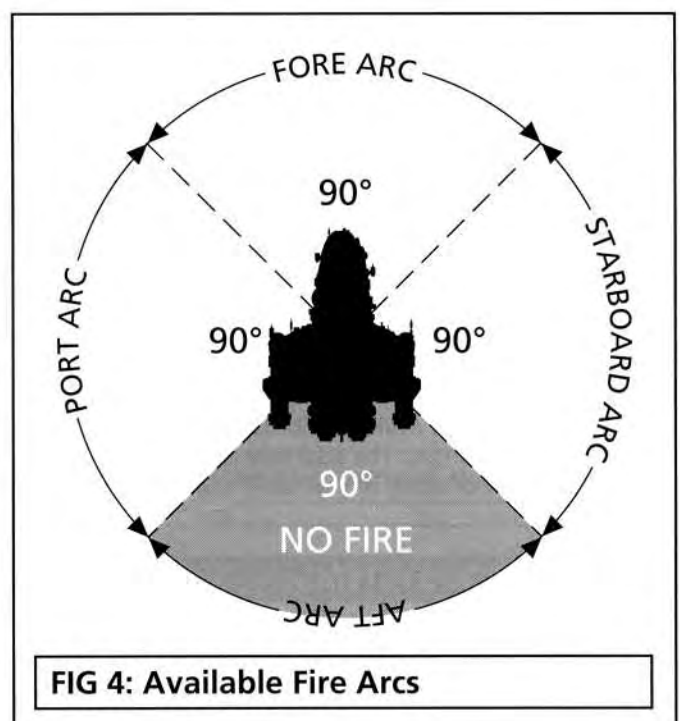
The 360 degree space around each ship is divided into four equal (90 degree) ARCS, labelled FORE, AFT, PORT and STARBOARD, as shown in Figure 4.

IMPORTANT NOTE!

NO ship may fire OFFENSIVE WEAPONRY through its AFT arc; this is due to the spatial distortions of the ship's Drive fields, which make it impossible to accurately track a distant target through the rear 90° of the ships's arcs.

Close-range DEFENSIVE systems, such as PDAF and ADAF Batteries, ARE permitted to fire through the AFT arc to engage hostile Fighter Groups.

These Fire Arcs determine which of a ship's weapon batteries may be brought to bear on a particular target ship, as some Batteries will be unable to fire through certain arcs. A given target ship may only be in ONE Fire Arc of the firing ship – if the line dividing the arcs passes so nearly through the centre of the target that it is impossible to determine which arc it is in, then decide by a random D6 roll (odds = one arc, evens = the other).





NOTE that it is the CENTRE of the model, or the centre of its stand if it is mounted on one, that is used to determine the exact location of the ship itself; all distances and ranges are similarly measured to and from this centre point.

Note to users of the First Edition of FULL THRUST:

The banning of Aft-arc fire is a major change to the basic rules, which enhances positional play and the use of tactics considerably; there is great satisfaction to be had by getting up behind a Dreadnought with your Cruiser and letting it have all batteries straight up the Drive Tubes, and the ***** can't shoot back....

This ruling makes players think much harder about the relative position of their ships, requiring the use of Escorts and the like to 'cover' the blind spots of the bigger ships).

BEAM WEAPON BATTERIES:

The main weapon system used by most ships in the game is an Energy Weapon, referred to simply as a 'Beam'. In the background provided for the game in this rulebook, these Beam weapons are assumed to be a development of a Particle Accelerator; if the players are using their own background material then the weapon can represent a Laser, Phaser, Blaster or whatever!

Beam weapons are mounted on ships in BATTERIES, consisting of a number of projectors slaved together under a single control system. There are three basic classes of Battery available:

PRIMARY ('A' class) Batteries are the heaviest, long-range weapons;

SECONDARY ('B' class) Batteries are medium-power types used on smaller ships;

TERTIARY ('C' class) Batteries are the lightest anti-ship guns, with only limited range.

There is also a lighter-still version of the C class weapon which is used on Fighter craft and for the Anti-Fighter defence; this is more fully described in the section on Fighter combat.

BEARING OF BEAM BATTERIES:

Each Battery of Beam weapons fitted to a ship may be mounted to fire through one, two or all three of the eligible Fire Arcs around the ship (no fire is possible through the fourth (Aft) arc). The MASS of each Battery is not affected by the number of arcs through which it can bear, but the COST in construction Points is increased for each arc the Battery can fire into.

Batteries bearing through TWO arcs must use ADJACENT arcs: for example a two-arc mounting might be able to fire through Forward and Port arcs or Forward and Starboard, but NOT just Port and Starboard.

Please note that even though a single Battery is able to bear through (say) 3 arcs, it can still only fire ONCE per turn, at a target in any one of those three arcs.

When marking weapon batteries on the ship record sheet, you must indicate which arcs each Battery is capable of bearing through; the Battery symbol (a circle with a letter denoting Battery class) is marked with one or more lines as shown in Figure 5 – think of the symbols as 'barrels' on a turret, showing where the turret can fire.

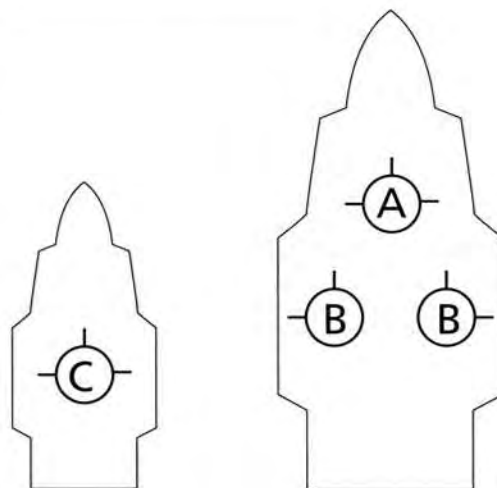


FIG 5: Bearing of Beam Batteries

Each Battery on a ship can potentially fire independently of the others, but the total number of different targets that can be engaged during one turn of firing depends on the number of Fire Control systems the ship is equipped with; this is more fully explained in the rules on Fire Control.

NOTE THAT OTHER SHIPS DO NOT BLOCK LINES OF FIRE – NO SHIP CAN 'HIDE' BEHIND ANOTHER.

WEAPON RANGES, FIRING AND DAMAGE:

The various types of Beam Batteries have different ranges and effects:

'A' Class Batteries have a maximum range of **36"**. When firing an 'A' Battery at a range of **0-12"**, **THREE dice** are rolled for hits; at **12-24"**, roll **TWO dice**, and at **24-36"**, **ONE die**.

'B' Class Batteries have a range of **24"** maximum. At **0-12"** roll **TWO dice**, and at **12-24"** only **ONE die**.

'C' Class Batteries have a maximum range of only **12"**. Roll **ONE die** up to this range.

For every die rolled, damage is inflicted on a UNSCREENED target ship as follows:

Every 1,2 or 3 rolled = NO EFFECT (either a miss or insignificant surface damage).

Every 4 or 5 rolled = ONE DAMAGE POINT to the target.

Every 6 rolled = TWO DAMAGE POINTS inflicted.

Note that these damage levels can be reduced by the use of **SCREENS** on the target ship, as fully explained in the **DEFENSIVE SCREENS** rules.

When **DAMAGE POINTS** are inflicted, these points are marked off the target ship's Damage Track on its Ship Record Sheet diagram, starting at the top left of the Damage boxes and crossing out one box per Damage Point inflicted. When you reach the **END** of one line of boxes on the Damage Track, refer to the rules on Threshold Points and Systems Damage.

When a ship has had ALL its Damage boxes crossed out (ie: it is reduced to 0 Damage Points or less) then it is destroyed and is immediately removed from play.

BASIC FIRE EXAMPLE:

A ship fires at an enemy vessel at a range of 18". The firing ship can bring two Batteries to bear through the arc containing the target, one 'A' class Battery and one 'B' Battery (whether the ship also carries any 'C' Batteries is not relevant to this example, since they would be out of range).

The 'A' Battery has a firepower of 2 dice at a range of 12-24" and the 'B' Battery has 1 die at the same range; thus the firepower total against the target is 3 DICE.

Rolling the 3D6, say the firing player scores 1, 5 and 6.*This inflicts a total of THREE points of damage on the target – the 1 is a miss, the 5 does 1 point of damage and the 6 does 2 points.

Note that this example assumes that the target ship does NOT have any Screens to protect it. If, for instance, it had Level-2 Screens in operation then the damage total for the same dice rolls would be only TWO, not three – the 6 rolled would do only ONE point of damage instead of the two (refer to rules on **SCREENS** for full explanation).

DEFENSIVE SCREENS:

Screens are Energy-field generators used to afford ships partial protection from some weapon attacks. They are not 'Force Fields', but systems of electromagnetic shielding that can disrupt the Particle Beams fired by ship's Beam Batteries; when a Beam shot hits a Screen, the charged particles in the Beam are partially dispersed and reduced in energy, thus reducing their potential to damage the target ship.

The actual degree of protection given depends on the 'level' of screens that the target ship is carrying. Each level is represented by a single Screen generator, so a ship with Level-1 screens would be carrying a single Screen generator, while a ship with Level-3 screens would have three separate Screen systems.

Each Screen generator on a ship is considered a separate system when checking for system damage at Threshold Points, and may be knocked-out individually either by threshold damage or Needle Beam weapons: thus if a ship with Screen Level-3 has to make a Threshold damage check and loses two of its Screen systems, it drops to Level-1 Screens.

If a ship that is protected by Screens is fired on by Beam weapons (whether 'A', 'B' or 'C' batteries), the Damage inflicted by each Die rolled is varied as follows:

For **Level-1 Screens**, rolls of 5 inflict **one point** of damage, and rolls of 6 do **2 points**. (In other words, ignore any rolls of 4 that would have damaged an unscreened ship).

With **Level-2 Screens**, rolls of 5 and 6 each inflict only **one point** of damage.

For **Level-3 Screens** (the maximum available to any single ship), ignore all rolls except those that score 6, which do just **one damage point**.

Note that Screens can only protect against fire from Beam Batteries and Fighter weaponry (which are short-range Beams), and against the effects of Detonation Mines. Pulse Torpedoes and the highly-focused energy of Needle Beams are both able to penetrate Screens with no degradation of their damage effects.

In general, Escort classes of ships will NOT carry screens; the generators are very bulky, expensive and require large amounts of power – it is theoretically possible to fit one on, say, a Frigate hull, but there will be virtually no payload or power capacity left for any weaponry!

Most Cruiser-size hulls will mount Level-1 Screens, and Capital classes often carry Level-2 or 3 depending on their overall mass.

When constructing your own ships using the Design rules, you may add Screens or not, as you wish, provided you are willing to use up the MASS they require and pay the Points cost.

'THRESHOLD POINTS' AND SPECIFIC SYSTEMS DAMAGE:

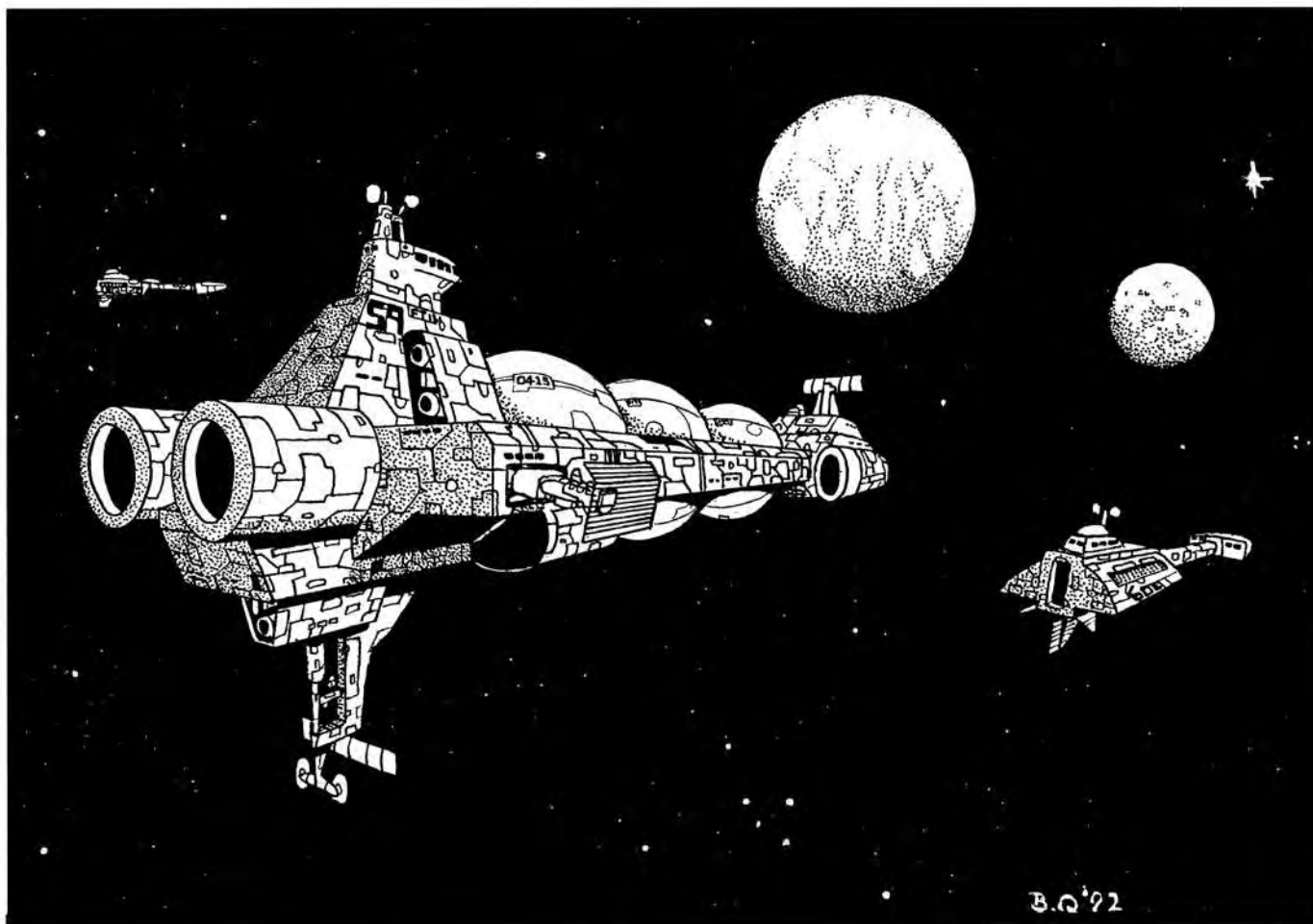
As a ship takes damage from incoming fire, there is a chance that some of the ship's specific systems (Drives, weapons etc.) will be damaged or destroyed.

To avoid having to roll for possible 'critical hits' every time damage is inflicted we instead use the idea of 'Threshold Points' at which the players will check to see if each system on the ship is still functioning. A Threshold Point occurs each time the accumulated damage points reach (or pass) the end of one row of boxes on the ship's Damage Track. At this point, the player must roll one die for each system on his ship (except any already destroyed); the system rolled for is 'lost' (and crossed out on his ship diagram) in the following circumstances:

At the **FIRST** Threshold Point (ie: the end of the first row of damage boxes), any system for which a 6 is rolled is knocked-out.

At the **SECOND** Threshold Point (the end of the second line of boxes), a system is lost on a roll of 5 or 6.

At the **THIRD** point, a roll of 4, 5 and 6 destroys a system.



You will see from the Damage Tracks on the ship diagrams that an ESCORT class ship will only have to make ONE Threshold Point damage check, as there are only two lines of damage boxes; CRUISERS have three lines of boxes, so may have to make TWO checks at different times in the game, while CAPITAL ships may need up to THREE checks at various times, as they have FOUR rows of damage boxes. With the 'kill number' reducing by one each time, on its last Threshold Point a Capital Ship will be losing any remaining systems on rolls of 4 and above!

Special Note: As each system is knocked-out as a result of a Threshold Point Check it is crossed off the diagram, with the exception of the ship's DRIVE SYSTEMS (the Normal Space Drive). When the Drives first suffer a 'destroyed' roll on a damage check, they are reduced to HALF the original Thrust Rating; if they are then hit a SECOND time on a subsequent damage check, they are disabled completely.

Each level of SCREENS is considered a separate system, so a ship with Level-3 screens has its system rolled for THREE times at each damage check; it may lose some, all or none of its Screen levels.

Ships carrying FIGHTER GROUPS have their Fighter facilities rolled for just as for any other system: when a Fighter Bay

is knocked-out any Fighters still aboard that bay are lost, and the bay can no longer recover fighters that are in flight – in other words, if a Fleet Carrier has launched its full Fighter complement and then loses two of its six Fighter Bays in a Threshold Point check, then if all six Groups make it back two of the Groups will not be able to land! (Though the individual Fighters may take spaces in other bays available due to losses in other Groups – basically the loss of a bay simply reduces the Carrier's capacity by six individual Fighters).

SHIPS LEAVING THE TABLE:

As there is no MAXIMUM speed for any ship (they can theoretically keep accelerating each turn without limit), it is possible that sometimes a ship may find it impossible to turn enough to avoid flying off the playing area. If this occurs, roll 1 die: on a roll of 1,2 or 3, the ship may NOT return to play during the game; a roll of 4,5 or 6 indicates the ship may re-enter the table after the equivalent number of Turns have elapsed (eg: 5 Turns if a 5 is rolled). Ships will always re-enter play from the same side of the playing area as they left, though the actual point of entry is up to the player.

FILLING OUT THE SHIP RECORD SHEET:

When you have chosen the ships you wish to use in a game, all the details of those ships must be entered on a copy of the Ship Record Sheet. Each ship takes up one of the ship diagram "boxes" in the upper part of the sheet – the small boxes on the top row for Escorts, the second row for Cruisers and the large bottom row for Capital Ships (Merchants should use whatever size of box best suits their overall MASS and Damage Points).

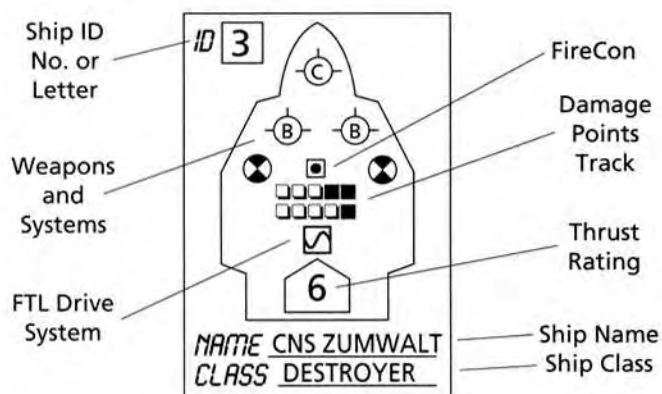
In the top left corner of the box, enter whatever I.D. number, letter or symbol identifies the particular ship model or counter on the table. Now fill in the ships CLASS and NAME (if you have given it one) on the lines underneath the actual ship diagram. On the diagram, put all the symbols for the weapons and systems that the ship is fitted with; the symbols to use for each type of system are shown on the tables on pages 14 and 30. Do not forget to indicate on Beam Battery symbols the arcs of fire that the Battery may cover. In the case of systems that may only fire through ONE arc, ensure that the symbol is pointing the correct way to show which arc is covered (eg: with Needle Beams).

You will note that all the ship diagrams already have the FTL Drive symbol printed on them: if you are designing a Non-FTL ship, be sure to cross the symbol out. The diagrams are also provided with the basic number of Fire Control symbols for each classification; if you wish to purchase more during the Ship Design sequence, simply add extra symbols. If your ship has FEWER FireCons than shown (eg: if using a Capital Ship diagram to represent a large Merchant) then cross out any unwanted FireCon symbols.

Finally, you need to fill-in the Damage Track (the rows of small boxes above the FTL Drive symbol) to show the actual Damage Point total that your ship can take. Divide the number of Damage Points the ship has by the number of rows of boxes on the diagram, then black out all but this number of boxes on each line. If the number does not divide exactly, the UPPER lines should have fewer boxes left open, with the surplus being put on the lower lines.

Example: a Destroyer has 7 Damage Points; the Escort-size diagrams each have 10 damage boxes, in two rows of five. Fill in the right-hand TWO boxes on the top row (leaving 3 white boxes) and the far right-hand box only on the lower row (leaving 4 white boxes). The total of seven white boxes which are left represent the Damage Points the ship can take, and the first Threshold Point for Systems Damage (see pages 10/11). will be reached after 3 points of damage have been inflicted.

YOU MUST ALWAYS USE **ALL** THE ROWS OF THE DAMAGE TRACK, SO THAT THE SHIP HAS THE CORRECT NUMBER OF THRESHOLD POINTS.



INTRODUCTORY SCENARIO

THE FIRST BATTLE OF GRENDDEL, 2137

This is a very simple, quick scenario designed to allow players to familiarise themselves with the basic mechanics of Movement and Combat in the game. The two forces involved are evenly balanced and the situation is a simple "meeting engagement" between two fleets. Victory goes to the player who survives longest, or who persuades his enemy to flee the table.

This first scenario can be played using just the Core rules (page 3 to page 12) and on page 47 you will find a full set of copy-and-cut-out counters to represent all the ships used in the battle – so you can set up and play almost immediately, without even needing any ship models.

Each player has the following forces at his disposal:

TWO LIGHT CRUISERS, each with a Thrust Rating of 6 and armed with 3 'B' Batteries and Level-1 Screens, (they also have 2 PDAF Systems each, though these will play no part in this scenario as there are no Fighters used on either side). The Cruisers each have 11 Damage Points.

THREE FRIGATES, each with Thrust of 6 and armed with 1 'B' Battery and 1 'C' Battery (plus 2 PDAF Systems, which again are not used); the Frigates each have 5 Damage Points.

The sample of the Ship Record Sheet given on page 13 is already filled in for these ships – all you need to do is photocopy the sheet twice (one copy for each player) and fill in names for your ships if you so desire. The game is then ready for play.

The opposing fleets enter the table from opposite ends, with all ships moving at an initial velocity of 8 (ie: moving 8" per turn). The action from then on is up to you!

NOTE: once you have played through this small battle, read the rest of the rules and then try the same battle again using some of the Advanced rules – experiment with giving the Cruisers a Torpedo system or Needle Beam, or allowing each side to use a Fighter Group or two (assume the Fighters are based on Orbital Installations that are off the table).

SAMPLE PREPARED FOR INTRODUCTORY SCENARIO

FLEET MOVEMENT CHART FLEET: _____ ADMIRAL: _____

[illegible]

3

SHIP CLASSES

BASIC SHIP CLASSES AND HULL SIZES:

Ship Class	General Type	Total* Mass	Damage* Points
Courier Boat	Escort	2	1
Scoutship	Escort	4	2
Corvette	Escort	6	3
Frigate	Escort	10	5
Destroyer	Escort	14	7
Light Cruiser	Cruiser	22	11
Escort Cruiser	Cruiser	26	13
Heavy Cruiser	Cruiser	32	16
Battlecruiser	Capital	40	20
Battleship	Capital	48	24
Battledreadnought	Capital	60	30
Superdreadnought	Capital	80	40
Light Carrier	Capital	70	35
Fleet Carrier	Capital	98	49
Bulk Tanker	Merchant	100	25
Heavy Freighter	Merchant	60	15
Exploration Cruiser	Merchant	48	12

* See pages 29-31 for explanation of how these figures are arrived at.

Ships are referred to in the rules by common Naval titles (Frigates, Cruisers, Battleships etc.) as this will be simple for most players to relate to, and is also the terminology used in much of the SF media. If you want to give the classes more exotic names, feel free to do so!

Note that if you are using commercial model ships, just because a manufacturer happens to classify a particular model in his range as a 'Destroyer', this is in no way prevents you calling it a Cruiser, or anything else that fits in with your fleet structure!

BASIC SHIP DIAGRAMS:

The ship diagrams below show the weapon/system fits of all the basic classes included in this section. The designs include Fighter Groups and Anti-Fighter Defences (ADAF and PDAF) where appropriate, but otherwise they use only the systems covered in the Core Rules section. If you wish to "customise" the ships using some of the extra weapons systems given in the Advanced rules, please refer to the table of systems on page 31, which gives the MASS and Points cost of each system and the table on page 30 illustrates the symbols to be used for those weapons not shown in the key below.

KEY TO SYMBOLS USED ON BASIC SHIP DESIGNS

BEAM BATTERIES:

Examples – see page 9 for full explanation



FIRE CONTROL SYSTEM (FireCon)



POINT DEFENCE ANTI-FIGHTER (PDAF)



AREA DEFENCE ANTI-FIGHTER (ADAF)



SCREEN GENERATOR

Level-1 shown: for extra levels add more symbols



FIGHTER GROUP

6 Fighters, including Hangar Bay and launch facilities

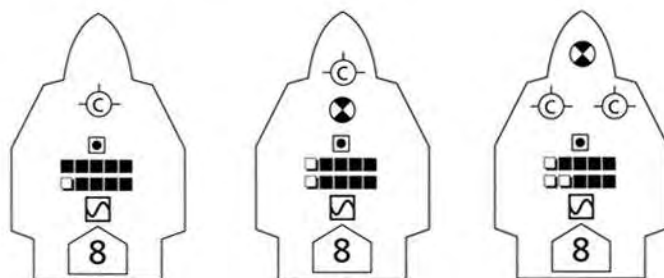


FASTER THAN LIGHT (FTL) DRIVE



NORMAL SPACE DRIVE

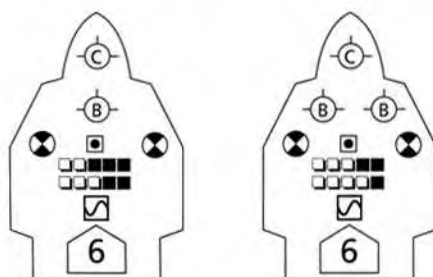
Example – Number indicates Thrust Rating



COURIER
15 POINTS¹

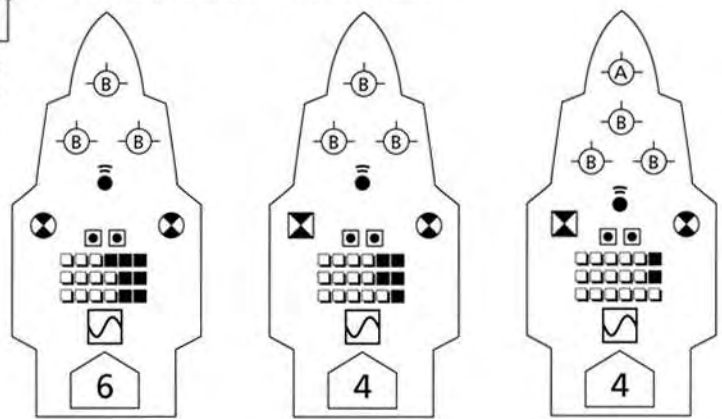
SCOUT SHIP
28 POINTS

CORVETTE
43 POINTS



FRIGATE
65 POINTS

DESTROYER
92 POINTS

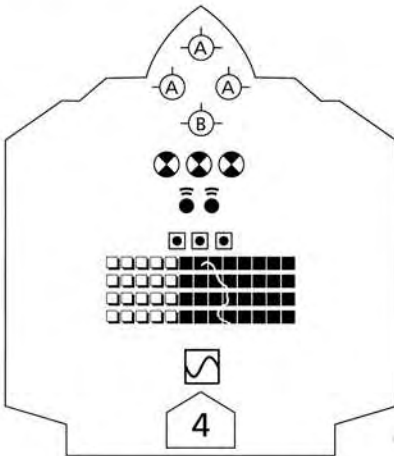


LIGHT CRUISER
190 POINTS

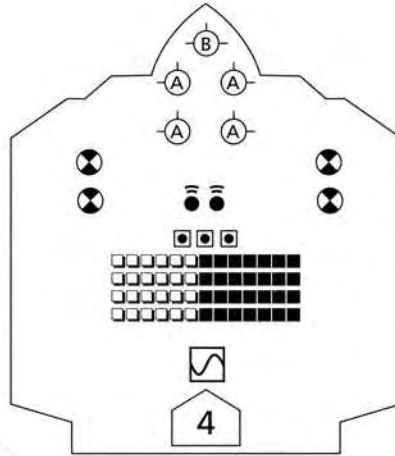
ESCORT CRUISER
195 POINTS

HEAVY CRUISER
238 POINTS

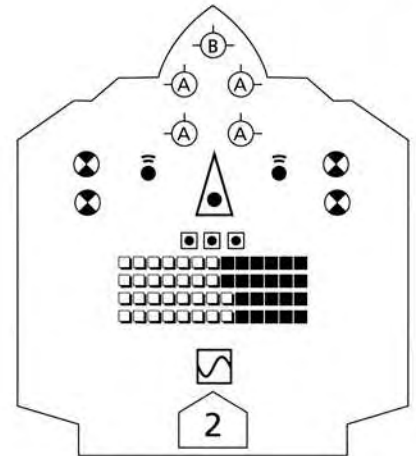
¹ THIS REFERS TO 'POINTS COST' AS EXPLAINED ON PAGES 29-31; IT DOES **NOT** REFER TO DAMAGE POINTS.



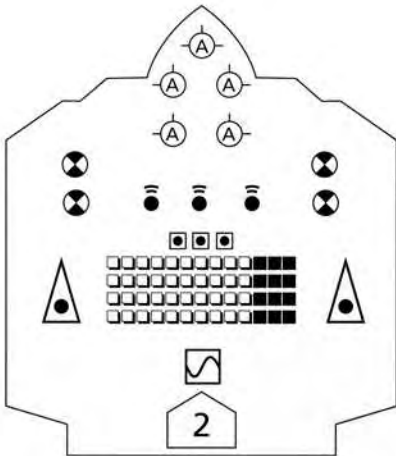
BATTLECRUISER
381 POINTS



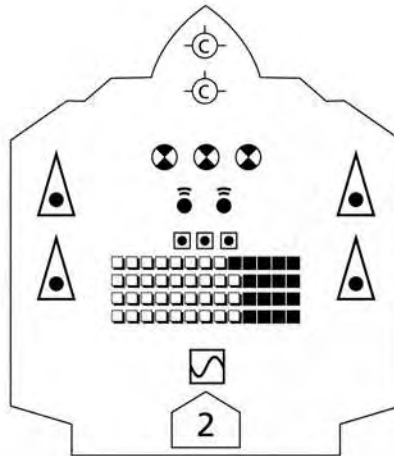
BATTLESHIP
447 POINTS



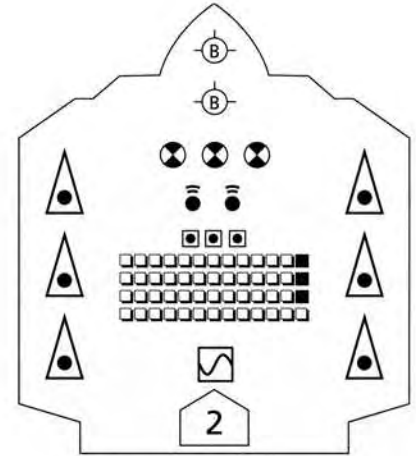
BATTLE DREADNOUGHT
431 POINTS



SUPER DREADNOUGHT
580 POINTS

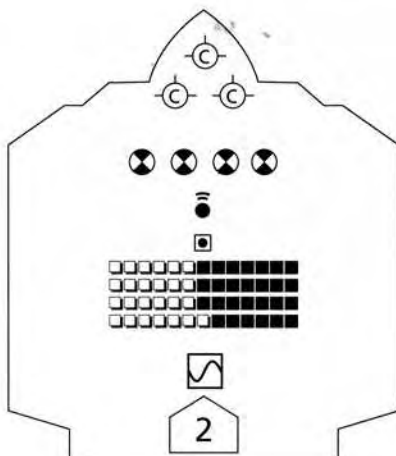


LIGHT CARRIER
499 POINTS

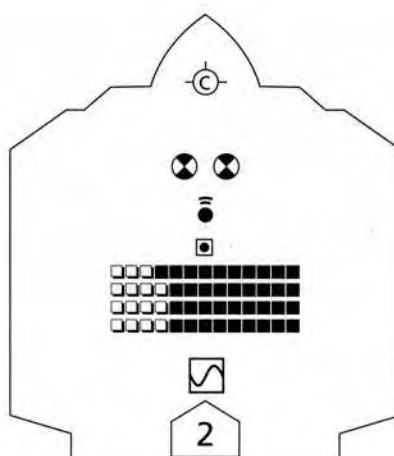


FLEET CARRIER
687 POINTS

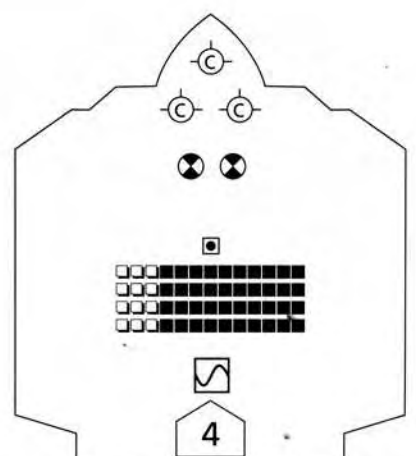
TYPICAL MERCHANT SHIPS



BULK TANKER
502 POINTS



HEAVY FREIGHTER
306 POINTS



SURVEY CRUISER
333 POINTS

4

ADVANCED RULES – FIGHTERS

FIGHTERS:

Fighters are small combat craft that are not themselves FTL-capable; they are carried between stars by larger ships, either specialised Fighter Carriers or some of the larger Capital Ship classes.

Fighters operate in GROUPS of 1 to 6 craft, with each Group moving and firing as a single unit. The carrying capacities of Fighter-equipped ship classes are:

BATTLEDREADNOUGHTS ('LIGHT' DREADNOUGHTS): ONE Fighter Group (6 Fighters).

SUPERDREADNOUGHTS: up to TWO Fighter Groups (12 fighters).

LIGHT CARRIERS: up to FOUR Fighter Groups (24 fighters).

FLEET or ATTACK CARRIERS: up to SIX Fighter Groups (36 Fighters).

Fighter Groups may be LAUNCHED from a Carrier or Mothership in any Turn, but to do so the carrier must NOT make any changes to either Course or velocity in that turn. The Fighters are launched at the HALFWAY point of the

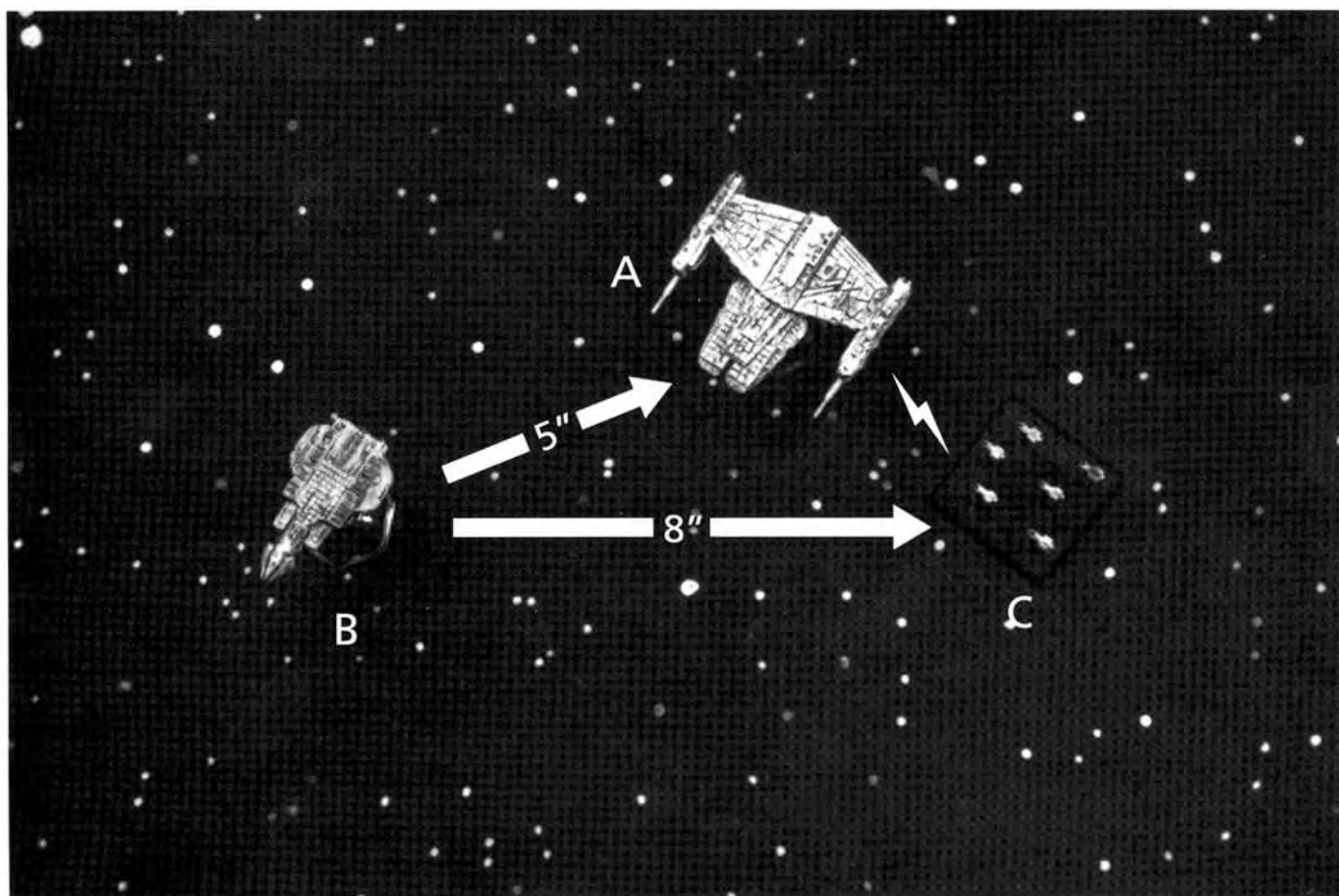
Carrier's movement; the owning player should note in his orders at the start of that Turn that the Carrier is to launch Fighters. Actual Carriers can launch up to TWO groups of Fighters per Turn, other ships only ONE.

Recovery ('landing' of Fighters back on their Carrier) is similar to launching: the Carrier must move at a constant Course and velocity for that Turn and the Fighter Group must be moved so that it meets the Carrier at the END of the movement. All Fighter-carrying ships may recover ONE group only per Turn.

Fighter Groups do NOT require written movement orders, nor do you need to keep track of their Course or velocity; in each Turn, at the point specified in the Turn Sequence rules (pages 3-5), you may move any or all operational Fighter Groups up to **12"** each, in any direction. Players should alternate in moving their Fighter Groups until all have been moved.

FIGHTER ATTACKS

Each Fighter is armed with a single weapon, similar to a



Area Defence Anti-Fighter Weapons:

Battleship "A" is under attack from Fighter Group "C" which would normally be out of range of the ADAF system on Heavy Cruiser "B". However, as the Cruiser is within 6" of the ship being attacked, it MAY fire its ADAF at the Fighter Group



shorter-ranged 'C' Battery in effect. The RANGE of Fighter weaponry is 6", and a Group may ONLY fire at targets in the Fighters' FORE arc. All Fighters in the Group must engage the SAME target ship.

ROLL 1D6 PER FIGHTER IN THE GROUP: Hits and damage are scored per die, using the same results as Beam Battery Fire. Screens protect as normal against Fighter weapon fire.

ANTI-FIGHTER DEFENCES:

Most ships are equipped with short-range Beam turrets for use against attacking Fighter Groups (starship main weapon Batteries are not capable of engaging Fighters - it would be like trying to use an 18" Naval Gun as an Anti-Aircraft weapon!).

There are two types of Anti-Fighter (AF) systems: POINT DEFENCE and AREA DEFENCE. A POINT DEFENCE AF system is only capable of engaging Fighters that are actually attacking the ship equipped with the system - it is purely a self-defence weapon. An AREA DEFENCE AF system, on the other hand, may engage ANY Fighter Group that is within a 6" range of the carrying ship, OR that is ATTACKING any friendly ship within 6" of the ADAF carrying ship.

When a Fighter Group is engaged by PDAF or ADAF weapons, roll 1D6 for each such weapon system firing. Hits are scored on the Fighter Group as follows:

1,2,3 = No Hits. 4,5 = 1 Hit – Group loses 1 Fighter.
6 = 2 Hits – 2 Fighters lost.

The same results apply when Fighters are attacked by other Fighters.

As Fighters are lost from the Group, the player must record the losses by whatever method is most suitable to the way he is representing the Fighter Group on the table; either individual Fighter models can be removed from the Group stand, or a small D6 or counter can be used to indicate the current strength of the Group.

EXAMPLE:

In Figure 6, ship A is under attack by Fighter Group X. Fighter Groups Y and Z are NOT attacking anything this turn. Ship B is carrying Area-Defence AF systems, while ship A has PDAF only.

Ship A can engage Fighter Group X with its own PDAF.

Ship B can engage Group Y, as it is within 6" range of its ADAF system; it may also engage group X, as although the Fighters are more than 6" away they are currently attacking a ship which is within ship B's protective range of 6". Fighter Group Z is safe from being fired on, as it is outside ship B's range and is not presently attacking anything.

FIGHTER-TO-FIGHTER COMBAT:

If a Fighter Group is within range (6") of an enemy Group which is also within its arc of fire (ie: its Fore quadrant), then it may attack the enemy Fighters exactly as it would an enemy warship, rolling 1 die per attacking Fighter and

counting hits accordingly. The enemy Group may only shoot back if its fire arc will bear on the attacking Group.

If, however, the Groups are moved so that their bases are actually TOUCHING, the two Groups may 'dogfight' - both Groups may fire, regardless of the facing of their fire arcs, and all fire within the dogfight is considered SIMULTANEOUS.

If one player moves his Group into base contact with an enemy Group and the opponent does NOT wish to engage in the dogfight, he may move his Group away provided it has not already moved that turn; if he does this, however, the attacking Group gets a free round of attack rolls before contact is broken.

When Fighters are engaged in a dogfight, none of them may fire their weapons at any OTHER targets outside the dogfight; similarly other ships may not fire INTO the dogfight, for fear of hitting their own side's Fighters!

EXAMPLE:

Player A moves a group of 5 Fighters into contact with an enemy group of 4 Fighters which has already taken its movement for that turn. As player B's group cannot evade, it is forced to engage in a dogfight. Player A rolls 5 dice, scoring 2,2,6,4,1 and therefore getting THREE 'kills' (one with the 4, two with the 6). In retaliation, Player B rolls 4 dice - combat in dogfights is simultaneous, so all four of his Fighters get to fire even though three have been hit - and scores 3,1,5,5 for TWO kills (one with each 5). Both players now remove the lost Fighters, leaving A with three craft and B with only one.

In the following turn, either player may elect to break off the dogfight, or both may decide to continue; if B's lone surviving Fighter breaks and tries to run, the three of A's group may immediately take a parting shot at it, which the retreating Fighter cannot retaliate to. Note that this shot counts as A's firing for that turn with that particular Fighter Group - they may then move, but may NOT fire at anything else that turn.

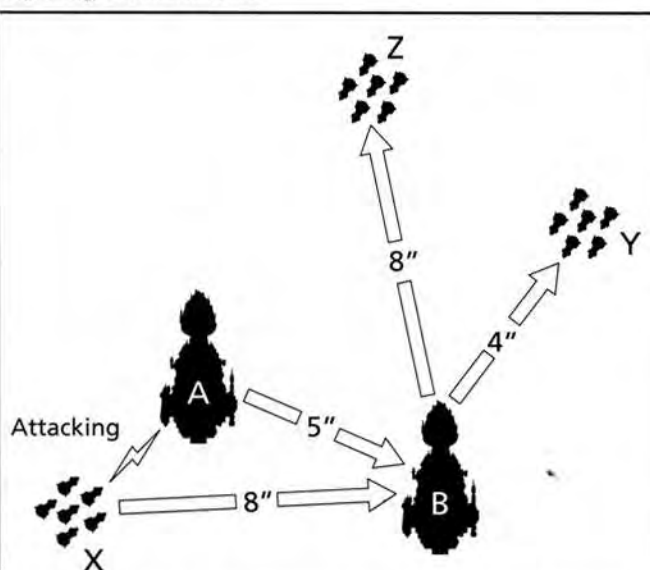


FIG 6: Anti-Fighter Defences

PULSE TORPEDOES:

A Pulse Torpedo launcher fires a bolt of plasma contained with a gravitic field, which is able to punch through Screens and cause significant damage to any target.

Torpedo launchers may be mounted to fire through the FORE arc of a ship ONLY. Each launcher may fire one Torpedo per game-turn; engaging a target with Torpedoes requires the use of one Fire Control system, which may NOT also be used to direct Beam Batteries that turn, even at the same target.

Pulse Torpedoes have a maximum range of **24"**. One D6 is rolled per Torpedo fired, and hits are scored on the following rolls:

At range of:

0-6"	Required score to hit:	3 to 6
6-12"	Required score to hit:	4 to 6
12-18"	Required score to hit:	5 or 6
18-24"	Required score to hit:	6 only

For each Torpedo that successfully hits the target ship, roll a **second D6**: the result is the number of Damage Points inflicted on the target (ie: from **1** to **6** points).

Note that Screens do NOT reduce the damage done by Torpedo hits.

NEEDLE BEAMS:

A Needle Beam is a short-range Energy Beam projector with a tightly-focused output and very accurate targeting systems. While it is not able to do the structural damage of a main-gun Beam Battery, it is used as a 'sniping' weapon to pick out individual systems on the target vessel – to knock out Drive Tubes, weapon mounts, Fire Control Sensor Arrays and so on.

The maximum range of a Needle Beam is only **9"**, but within this range the firing player may nominate any one specific system on the target, and attempt to kill it with the Needle shot. Once the target is nominated, roll **one D6**: on a score of **6**, the target system is knocked-out, as if it had failed a Threshold Point roll. No other damage will be caused to the target ship, and rolls of less than 6 have no effect at all.

Needle Beam systems may be fitted to fire through only ONE arc. A functioning Fire Control system is necessary to fire a Needle system, and may only direct Needle Beams at ONE specific point on the target (ie: if a ship was firing two Needles at an enemy and both were targeted on the enemy's Drives, then only the one Fire Control would be committed for the two shots; if, however, one Needle fires at the Drives and the other at a weapon Battery, the firing ship would need TWO Fire Control systems to make this attack.)

A Fire Control that is being used to direct a Needle attack may not be used to fire other weapons at the same time, even if they are firing at the same target ship.

Note that, as with Threshold Point damage rolls, a Needle hit on a ship's Drives does not automatically destroy the Drives; the **FIRST** such hit reduces the ship to **HALF THRUST** capability, and the **SECOND** hit knocks the Drives out altogether.

SUBMUNITION PACKS:

Submunitions are one-shot packs of short range, unguided 'scatter' missiles, which are often used to give smaller ships a cost-effective punch against larger vessels. Each pack represents a single cluster of missiles that are fired as a single salvo, all aimed at one target; when the pack has been fired its symbol is crossed off the Ship Record Sheet and it may not be used again.

The maximum range of a Submunition pack is **18"**: at a range of **0-6"**, **3D6** are rolled when the pack is fired; at **6-12"**, **2D6** are rolled, and at **12-18"**, just one **D6**.

Damage Points are scored from these dice rolls just as for Beam Battery fire, ie: **1,2,3 = No damage**, **4,5 = 1 Damage Point**, **6 = 2 Damage Points**.

Screen systems do **NOT** protect against the effects of Submunition attacks; the full damage is inflicted whether or not the ship is Screened.

The use of a Submunition Pack enables even the smallest ship to inflict a reasonable amount of damage in one shot, at the same MASS cost as the shorter-range 'C' Battery; however once the Pack is expended the ship is left un-armed, whereas the 'C' Battery is capable of continued use. The most common employment of Submunitions is for one-shot Fast Missile Boats using Courier class hulls, or as a heavy-punch armament on Scoutships in addition to a single 'C' Battery.

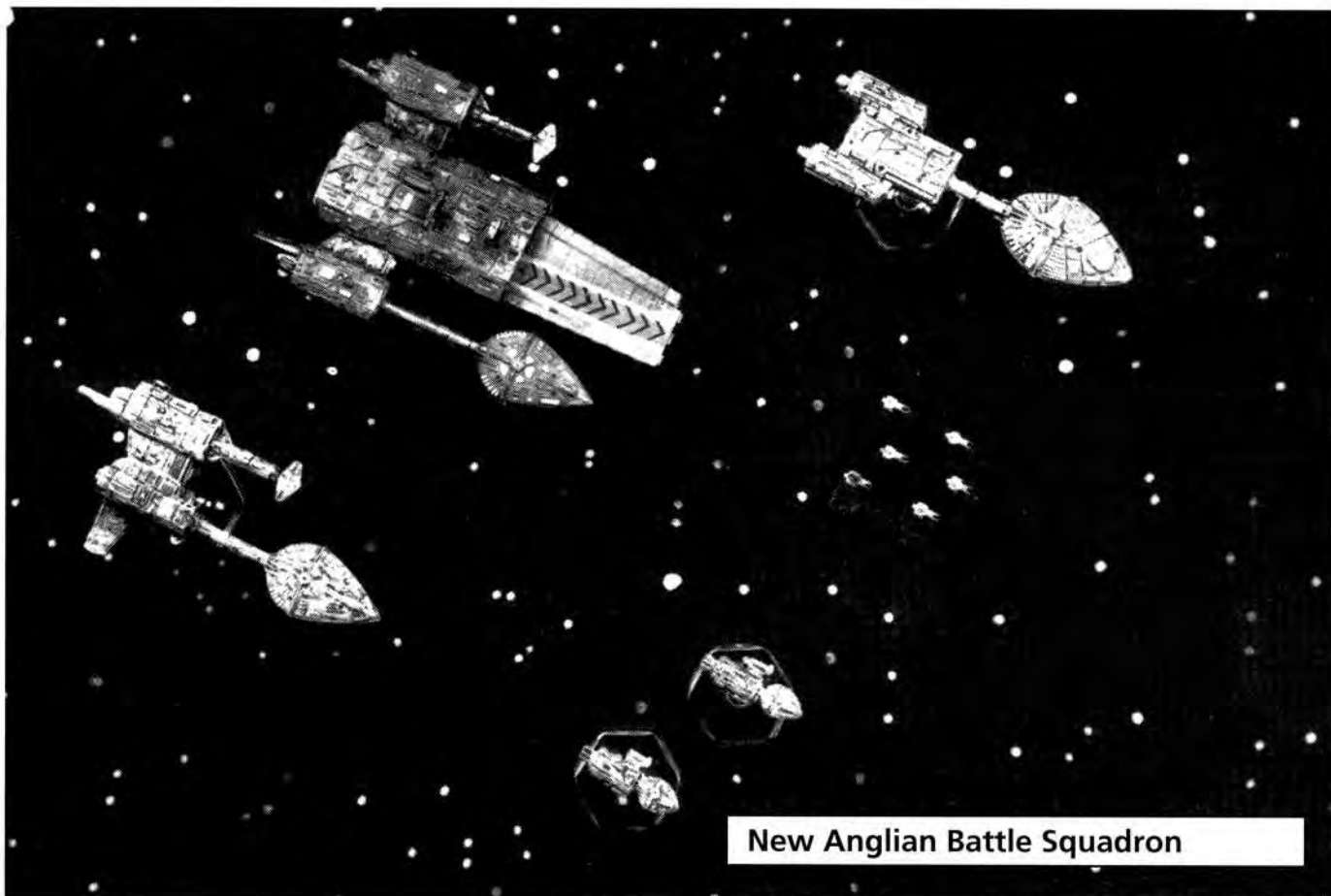
MINES:

The 'Mines' used in the game are actually more like 'dormant missiles', small Drones equipped with Detonation Beam warheads; when a hostile ship (ie: one not answering the correct IFF codes) comes within a certain distance of the Mine the warhead charge will detonate, directing a focused pulse of energy into the target ship in the micro-seconds before the Mine itself is consumed by the blast. If the resulting Beam hits that target, it does similar damage to a close-range hit from a 'B'-class Beam Battery; if the target is Screened, this will reduce the effectiveness of the Mine in the same way as normal Beam Battery fire.

The detection range of a Mine is **3"**; any enemy vessel that enters this radius from the Mine marker (at ANY point during its movement, not just at the END of its move) will be detected and fired on by the Mine; roll 2D6 and apply damage as for normal Beam fire, reducing accordingly if the target has Screens in operation. After a Mine has detonated, remove its marker from the table; they are strictly one-shot weapons!

MINELAYING:

Ships equipped with Minelaying systems may deposit Mine



New Anglian Battle Squadron

markers on the table during their movement phase; the player must note in his order for that ship that it will deploy Mines in that turn, for example with an 'M' in the order box.

Each Minelayer system fitted may deploy one Mine per turn, so a ship with two Mine tubes may drop two markers during its movement, either both at the same spot or at different points. The Mines may be placed anywhere along the ship's course during that movement; note that it is advisable that ships dropping Mines are moved **FIRST** after writing orders, so there can be no question of a player positioning his Mines in response to the enemy's movement in that turn.

Each Minelayer system carries **THREE** mines – as each one is deployed, cross out one 'spot' on the Minelayer symbol (see Symbols Tables on page 30).

A Mine marker does **NOT** become 'active' until the game-turn after the one in which is deployed. Once placed, the marker will remain on the table (completely stationary) until it detonates, or is cleared by a Minesweeping system.

MINESWEEPING:

Just as certain ships may be equipped to lay Mines, so others may be provided with systems to clear enemy Mines safely.

To attempt to dispose of a Mine marker, the Minesweeping ship must have its Sweeper system activated by noting this in its orders for that turn; it must then pass

within 3" of the Mine during the course of its movement, and at that point one D6 is rolled: on a score of 1, the Mine immediately attacks the Minesweeper, detonating and causing damage as normal. On a roll of 2, the mine does not attack, but is also not disabled; it remains in position and can attack other ships as normal. On rolls of 3 to 6, the Minesweeper system succeeds in disabling the Mine safely - the Mine marker is removed from play.

When a ship is using a Minesweeping system in active mode, it may **NOT** use any offensive weapon systems in that same turn; it may use defensive (Anti-Fighter) weaponry and any Screens as normal.

SPINAL-MOUNT NOVA CANNON:

IMPORTANT NOTE:

This is a **VERY** optional weapon, and is probably the most deadly single system available; however it does have its disadvantages as well – by all means experiment with fitting one to your largest ships, but don't say we didn't warn you...!

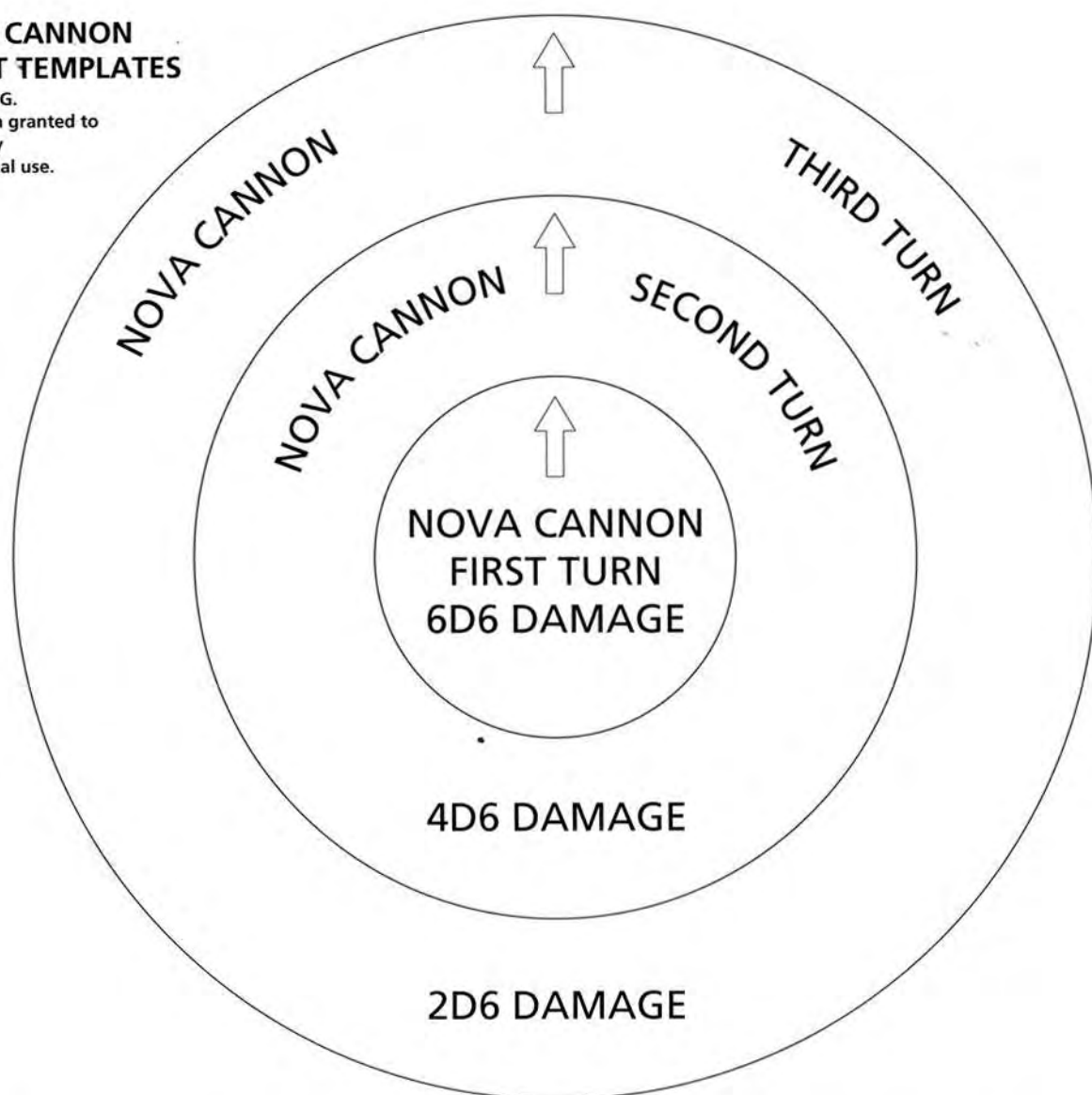
The NOVA CANNON is a massive weapon that can only be mounted in the spinal core of a Capital ship, and fires only **DIRECTLY FORWARD** - not just through the Fore arc, but actually on the centreline of the ship only. In other words, the weapon fires in whatever direction the ship's bow is pointing.

Firing a Nova Cannon draws a massive amount of power from the ship's Power Plant; on the Turn it is to be fired,

NOVA CANNON EFFECT TEMPLATES

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the player must note this in his movement orders for that ship, and the ship may not expend ANY other power at all for that Turn, ie: it may not apply any Thrust (to accelerate or manoeuvre), may not fire ANY other weapons, and even its Screens may not function for that Turn! If the Nova Cannon is then NOT fired that Turn, for any reason, then its 'arming' is lost and it must be re-armed the next Turn the player wishes to use it.

When the Cannon actually fires, a massive Railgun system projects a huge round that consists of an uncontrolled plasma generator and a powerful gravitic system; the projectile is hurled out to 6" in front of the ship (its minimum arming distance) and the plasma core is detonated, the gravitic field holding the plasma long enough for it to form a self-sustaining reaction, like a miniature sun!

Place a 2" diameter template at the arming point (6" from the ship's bow), and then move the template 18" outward along the line of flight. Any and all ships or other objects that are contacted by the template during its flight are immediately inflicted with a 6D6 roll of damage (ie: 6-36

Damage Points!). At the end of its total 24" move, the template is left in place on the table; on the NEXT Turn, at the start of the firing portion, the 2" template is replaced by a 4" one, which is then moved 24" along its original course; anything hit by this new template is subject to 4D6 of damage (ie: 4-24 Damage Points). Finally, on the THIRD Turn after firing, the 4" template is replaced by a 6" one, which is then moved another 24" - damage from this template is 2D6 (2-12 points) to anything in its path. At the end of its third Turn of movement, the Nova reaction exhausts its fuel and burns out - the template is removed from play.

Note that as with Pulse Torpedoes, the actual damage done by the Nova Cannon is equal to the number rolled on each D6 (ie: roll of 3 = 3 Points), rather than the 0, 1 or 2 damage system used for Beams and other weapons fire.

Screen Systems DO NOT reduce the Damage effects of the Nova Cannon in any way.



SENSORS AND TARGET IDENTIFICATION.

The use of this rule allows a basic form of 'Limited Intelligence' to be brought into the game, to make the initial fleet dispositions for a battle much more interesting and tactically challenging.

When the opposing forces enter the playing area, the actual ship models are NOT placed on the table; instead, each ship is represented by a 'Bogey' marker (either a simple counter or something like the 'black globe' made from a ping-pong ball as described later). These 'Bogeys' represent long-range sensor contacts indicating the presence of a ship, but not revealing its exact type – all that can be deduced about the ship is its general classification (Escort, Cruiser, Capital or Merchant) from its detectable Drive emissions.

Each Bogey marker should be identified with a code letter or number, which the owning player must secretly note as representing one of his ships; the Bogeys should also be marked in some way to show classification of ship they are representing – the easiest way to do this is with small-adhesive coloured stickers on the 'globe' bases, using different colours for Escorts, Cruisers etc. The counters provided on page 47 are already marked accordingly.

During the opening moves of the game, players write orders and move their Bogey markers just as if they were moving the actual ships (they must of course remain within the manoeuvring ability of the ship that each Bogey represents).

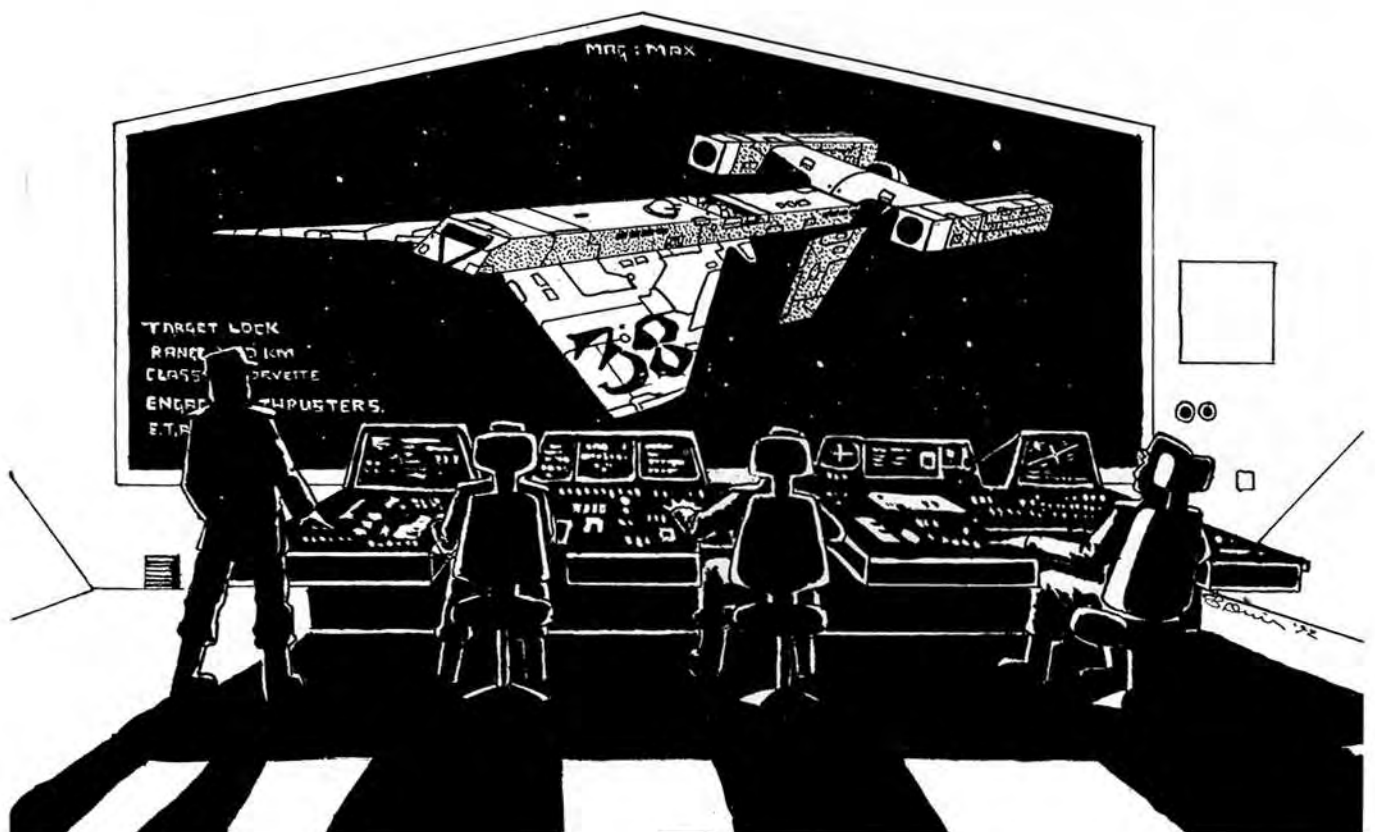
Bogeys may be 'revealed' (positively identified and replaced by the actual ship model) in one of two ways: either by PASSIVE or ACTIVE sensor scans.

PASSIVE Sensors are carried by all vessels, civil and military. When any ship comes within **36"** of an opposing Bogey, its Passive Sensor Array can identify the contact firmly: replace the Bogey with the actual ship. (If both ships are represented by Bogey markers, then they are both revealed simultaneously).

All MILITARY vessels also carry ACTIVE Sensor Arrays; these are longer-ranged detection systems than the Passive Sensors, but have the side-effect that when they are operated, the emission from them will reveal the identity of the ship making the sensor scan, as well as the ship being scanned.

The maximum range for ACTIVE sensor scans is **54"**. If a player wishes to use Active Sensors on one of his ships, he must note this in the Move Orders for that turn; if his own ship is still represented by a Bogey at that time, he must 'reveal' it and announce that he is making an Active scan. Escort class ships may scan ONE opposing Bogey per turn, Cruisers TWO and Capital ships up to THREE. The player chooses which of the enemy Bogeys he will scan (of those within 54" range) and his opponent must then reveal them.

Note that Sensors, both Passive and Active (Warships only), do NOT need to be 'paid for' during the Ship Design process – they are acquired 'free' as part of the Hull and basic systems.



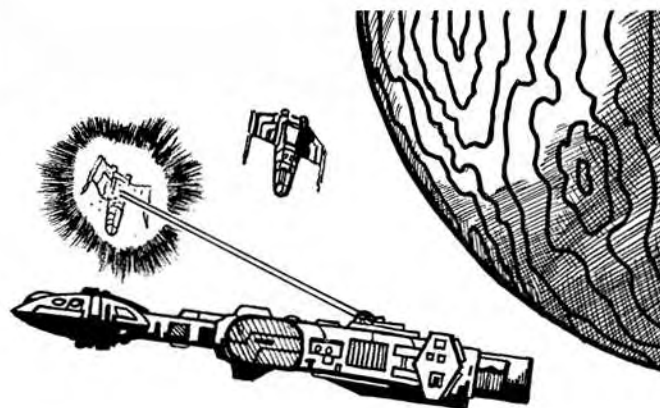
'DUMMY' BOGEYS AND 'WEASEL BOATS':

These are two options for adding extra confusion and uncertainty to play! With the agreement of both players, each side may deploy a number of 'dummy' Bogey markers alongside the 'real' ones, representing Drones equipped to output the signature of an actual ship and thereby confuse the enemy as to the actual strength and disposition of the fleet. Each 'dummy' Bogey costs 20 points from the owner's Fleet Budget, and emits the Drive signature of an ESCORT class ship; it can be moved on the table with the same manoeuvring ability as a Scoutship. The Dummy is simply removed from play as soon as it is scanned, either with Active or Passive Sensors.

The maximum number of Dummies that may be employed in any battle is equal to the number of 'real' ships in the players's force.

'WEASEL BOATS' are an alternative to the Drone decoys: they are small manned ships (usually Couriers or Scouts, but larger classes may be used if desired) that are equipped with systems designed to emit the signature of a much larger vessel.

The 'Weasel' decoy system takes up 1 MASS on the ship, and cost varies according to the signature level required:



for a system to emit the signature of a CRUISER class the cost is 20 points, for a CAPITAL SHIP signature it is 40 points.

While the Weasel Boat is represented by a Bogey marker, that Bogey is labelled as if it were the classification that the Decoy system is emitting. On it is scanned, the true nature of the ship is revealed (the system can only confuse the initial long-range information, not the close-in Sensors).

The Weasel Boat can of course manoeuvre as a normal Courier, Scout or whatever class it really is, but remember to restrict its moves to those possible for what it is acting as – if your opponent suddenly notices a supposed 'Capital Ship' making a four-point turn, he may become just a little suspicious...!

COLLISIONS AND RAMMING:

The distances represented by the moves and ranges in the game are actually so vast that the risk of an accidental collision between two ships is incalculably small, and is therefore ignored for all game purposes (collisions with asteroids and other large bodies are possible, see pages 25-26). If two ship MODELS would be actually touching at the end of all movement, they should simply be arranged as closely as possible, to the agreement of both players.

Deliberate attempts to ram another ship ARE possible in some circumstances, but such suicide attacks should be rarely attempted – crews would not be very keen on officers who ordered such tactics as a matter of routine!!

To reflect this, a player who wishes to attempt a ramming attack must roll a D6, AFTER having noted in his Movement Orders that the ram is intended for that turn; only if he rolls a SIX may the ramming attempt proceed. (Special option: players may agree that certain scenarios and/or certain races may make ramming attacks more likely, and hence reduce this required die roll for them).

In order to attempt the ramming, the player must have planned his move so that his ship ends the movement within 2" of the intended target ship (or models touching, in the case of large ship models). If he succeeds in this difficult task of anticipating the enemy's moves, AND



'Bogeys' in play:

Frigate in centre has committed its active sensors and thus revealed itself, while the other two ships remain unconfirmed contacts.



succeeds in his D6 roll as explained above, then the actual ram may be attempted.

Both players (attacker and target) roll a D6 each, and ADD the score to their respective ships' THRUST RATINGS: if the attacker ends up with the highest total, the ram is successful – if the target's total is higher he has evaded the ramming attempt.

When a ram succeeds in making contact, each player rolls another D6 and multiplies the result by the current (remaining) Damage Points that his ship has: the final result of this is the number of Damage Points inflicted on the OTHER ship as a result of ramming.

EXAMPLE:

A Corvette with 2 of its original 3 Damage Points left actually succeeds in ramming an undamaged Heavy Cruiser (with all its 16 Damage Points left); the Corvette player rolls a 4 on his D6, which inflicts $2 \times 4 = 8$ points of damage on the Cruiser. The Cruiser owner rolls a 3, thus doing $3 \times 16 = 48$ points to the Corvette!!! The Result is one vaporised Corvette, and a badly-damaged Cruiser.

It will be clear from this example that ramming can be very deadly when it succeeds: small ships are almost certain to be destroyed, and even the largest can be crippled – players who insist on using this tactic in unrealistic circumstances should be penalised in the most effective way possible... Don't let them play again!

MERCHANT SHIPS: DAMAGE TO CARGO AND HOLDS:

Most warships are little more than weapons platforms with Drives attached, but Merchant shipping has to fulfil other functions: carrying cargo, passengers or even scientific personnel and survey equipment (in the case of the Survey Cruisers).

When Merchant craft come under fire, damage will almost certainly be caused to the payload areas of the ship; to simulate this in a simple manner, we assume that every point of damage inflicted on the Merchant causes not only hull damage, but also cargo/payload damage in equal proportion. If a Merchant lost, say, half its total Damage Points during the game, then half the total cargo will also have been damaged/destroyed: the percentage of Damage Points lost equals the percentage of the cargo lost.

This can be particularly relevant in scenarios that revolve around Convoys – there is not much to be gained in getting your Freighters off the table with only a few damage

points left apiece, because by that time you will have lost most of the precious cargo you are trying to protect!

Casualties to passengers (in the case of Liners) and to specialist personnel and lab facilities on Survey ships can be reckoned in the same way, as can casualties and lost equipment when troop-carrying Assault Ships are attacked.

FASTER-THAN-LIGHT (FTL) DRIVES:

The forces generated by FTL Drive units are very powerful, and result in spatial distortions that can be highly dangerous in close proximity to any other mass, including other ships.

Most transitions to and from FTL are therefore made well out in open space, far from other shipping or planetary bodies. A fleet entering a system in FTL will generally perform Normal Space re-entry on the fringes of the system, with the ships of the fleet widely dispersed for safety, and then assemble into formation before entering the inner system on normal Drives.

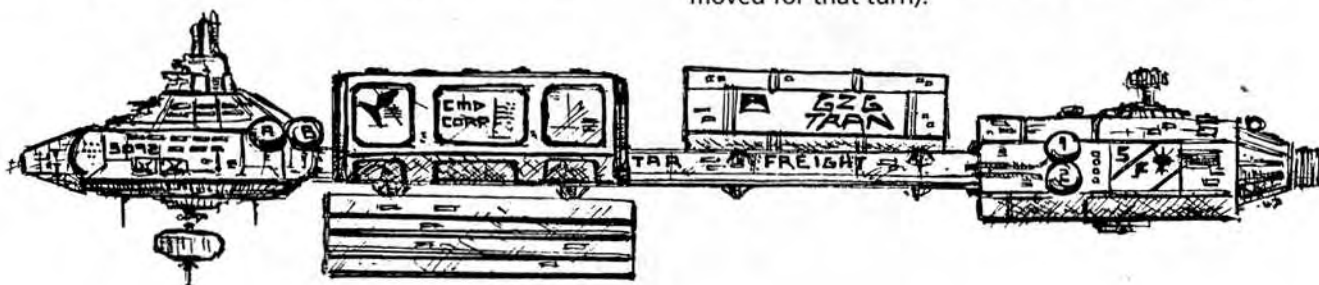
Occasionally, however, it may be either necessary or tactically expedient to run the risk of an FTL transition while actually engaged with the enemy. Such a dangerous manoeuvre might be a frantic attempt by a threatened ship to escape from the action, or a surprise attack by dropping out of FTL directly into combat (a particularly desperate tactic considering the danger involved).

The following rules cover such attempts to enter or exit FTL drive on the playing area, and the consequences of failure:

LEAVING THE TABLE UNDER FTL DRIVE:

If a ship attempts to engage its FTL drive units while on the table, the owning player must note this in his Movement Orders for that Turn; the ship may not apply any Thrust in that move, nor may it use any offensive weaponry (though defensive systems and Screens may continue to be used). When the ship is actually moved, the player must announce to his opponent that the FTL drives are being 'warmed-up' – the energy emission from the ship will be immediately obvious to enemy Sensors.

On the FOLLOWING Turn, the ship moves HALF its current velocity on its present course, then 'disappears' from the playing area, having gone into FTL space. (Note that any ships performing this manoeuvre should actually be moved AFTER all other ships on the table have been moved for that turn).



If ANY other ship, Asteroid, Fighter etc. is within 6" of the actual point of FTL entry (the point that the ship disappears from the table), then problems occur:

The ship attempting to enter FTL drive has a D6 rolled for it:

On a roll of 1, the FTL drive fails to engage – the ship remains in Normal Space at its present course and velocity (and completes the current movement).

On a roll of 2 to 4, the ship completes its FTL transition safely, but ALL ships and/or objects in the 6" radius immediately suffer 1D6 of damage (ie: 1-6 points), unmodified by Screens.

On a roll of 5 or 6, the ship attempting the FTL jump is completely destroyed, and all other ships within 6" immediately suffer damage equal to the total (original) Damage Points of the exploding ship.

(Example: if a 10 D.P. Ship failed its FTL entry and exploded, the energy release would cause 10 points of damage to EVERY ship within 6" of the explosion point).

Once a ship has left the table under FTL drive, it may NOT return to play at any time during that battle.

ENTERING BATTLE UNDER FTL DRIVE:

Any ships that are to enter the game by dropping out of FTL actually on the playing area must be noted as such at the START of the game, giving the number of the Game Turn in which they will enter, plus a specified point of entry on the table; the latter is usually most easily defined as a simple pair of co-ordinates measured from one corner of the table. The player must also note, at the same time, the starting COURSE of the ship after its emergence from FTL space.

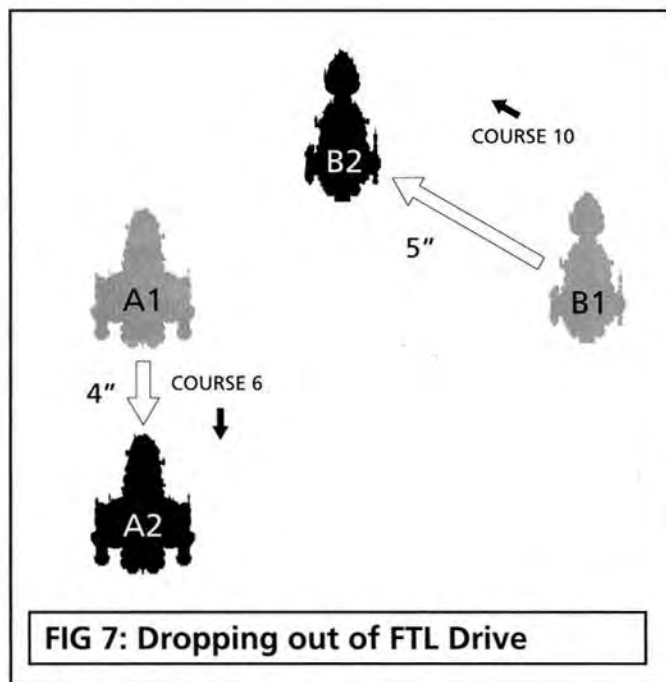


FIG 7: Dropping out of FTL Drive

When the specified Game Turn arrives, the player must announce at the start of the Turn (AFTER writing of movement orders) that he is making an FTL dropout, and place a counter or other marker at the intended entry point for the ship. He then rolls a 1-12 random number (either using a D12, or the D6 method described on page 3) to give a direction on the Course Gauge, and rolls a D6 for distance; the marker is then moved in the direction rolled, to a distance (in inches) equal to the D6 roll. The resulting final location of the marker is the point at which the actual ship is placed on the table.

EXAMPLE:

If two ships attempt FTL dropout at point A1 and B1 (Figure 7), each roll for direction and distance of error in their entry points: if ship A rolls 6 for direction and 4 for distance, it actually 'appears' at point A2. If ship B rolls 10 for direction and 5 for distance, it will appear at point B2.

OPTION: To add extra confusion and danger, if the DISTANCE D6 roll gives a 6, then roll a second D6 and MULTIPLY the result by the original roll of 6. This gives a potentially massive error (up to 36"!) and represents the dangerous inaccuracy of FTL exit – if this means a ship appears OFF-TABLE then that ship is deemed unable to enter the table during that battle.

As with ships leaving the table via FTL, those entering battle also risk damage if they appear too close to another object. Again, the danger radius is 6" around the ACTUAL point of appearance; if any ship or other body is within this distance when the ship enters Normal Space, roll a D6 for each ship or object (including the entering ship itself):

On a roll of 1 to 5, the ship/object being rolled for takes damage equal to the dice score (eg: a roll of 3 = 3 points damage).

On a roll of 6, roll a second D6 and multiply the result by the original 6, giving from 6 to 36 points of damage!



ASTEROIDS:

The ship models used in FULL THRUST (and indeed any other tactical space game) are actually vastly over-size compared to the space combat distances represented in the game; in true scale, the actual ships would be so tiny you probably couldn't see them!

This is the reasoning behind the ruling that ships cannot block line-of-sight or line-of-fire, in other words you cannot 'hide' one ship behind another, regardless of their classes.

However, there are some bodies (such as Asteroids or small Planetoids) that do have a significant size in relation to the playing area and therefore ARE able to block lines of fire, movement and Sensor detection.

If Asteroids are to feature in a particular game, we must first define exactly HOW they interrupt sighting and firing. If you are using round or spherical objects to represent the Asteroids then it is simple: any line between two ships that crosses any part of the Asteroid is 'blocked'.

If, however, you are using irregularly-shaped asteroid models, such as the 'foam chunks' ideas shown in the photo below, then it is necessary to mount them on bases (perhaps 1" or 2" across, depending on the Asteroid size). A line between ships is then blocked if it crosses any part of the Asteroid's BASE, which saves any disputes that could

be caused by the irregular shaped Asteroid model itself.

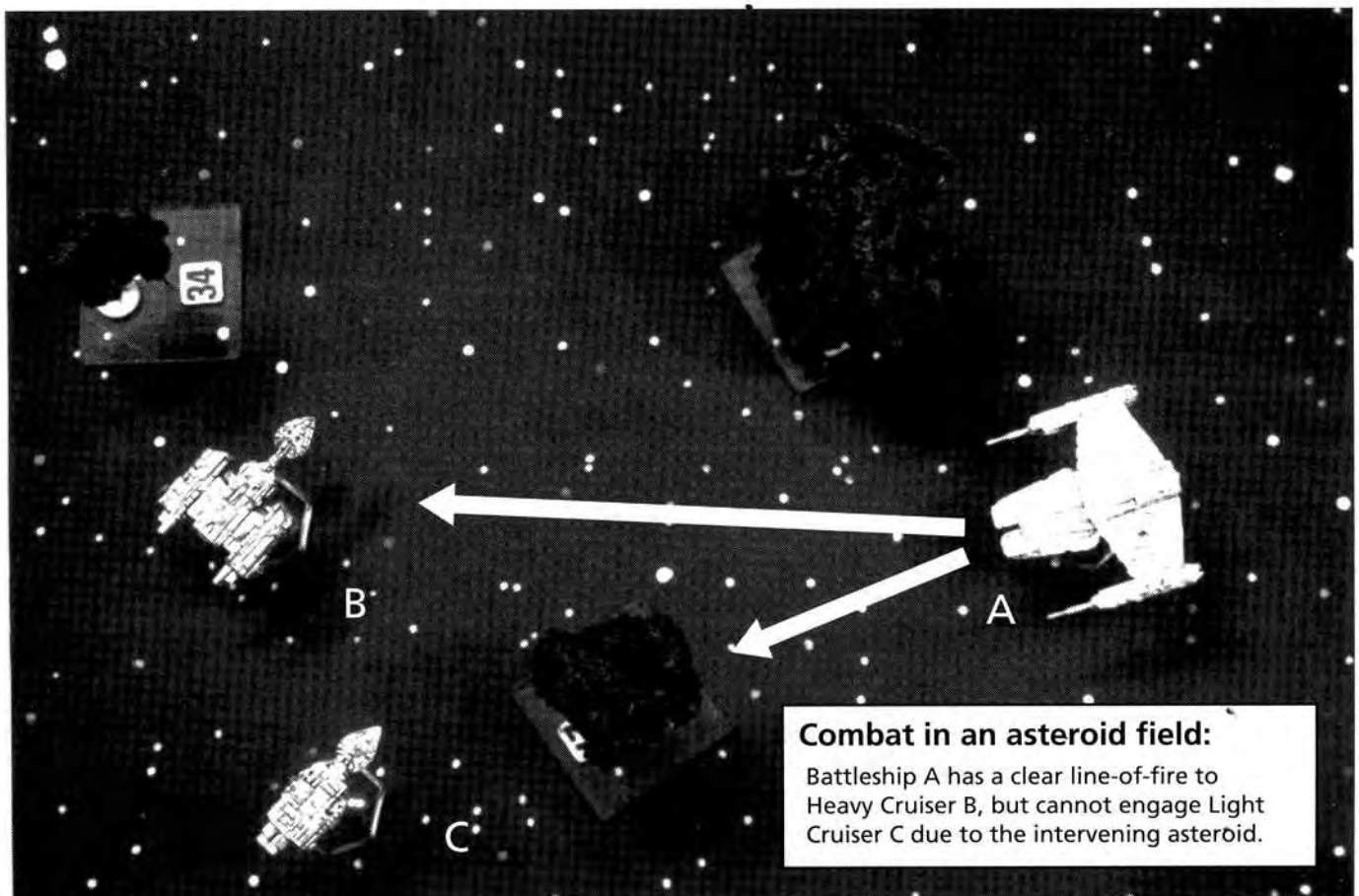
If the line-of-sight between opposing ships (between BASE CENTRES of models, remember) is blocked by an Asteroid, those ships may NOT fire at each other with any Beams or Torpedo weapons; Fighters and similar may of course still fly round the Asteroid to attack as normal.

Sensor Scans are also blocked by asteroids. At the start of the game, some ships may be 'hidden' behind bodies in an asteroid field; they are represented by 'Bogey' markers in the usual way for unconfirmed contacts, but do NOT have to be revealed until an enemy ship comes within scan range AND can get a clear line-of-sight on to the Bogey (Note this blocking applies equally to Active scan attempts as to Passive).

Asteroids can also be a serious hazard to navigation, especially if the field is moving relative to the play area and ships are attempting to travel too fast. If any part of the ship's movement causes it to intersect with an Asteroid there is the possibility of the ship crashing into the asteroid; to find if the ship manages to avoid a fatal collision, subtract the ship's total available THRUST RATING from its CURRENT VELOCITY; the number that results must be EQUALLED OR EXCEEDED by the roll of one D6 in order for the ship to avoid hitting the asteroid.

EXAMPLE:

If a Cruiser with a THRUST RATING of 4 is travelling at Velocity 9 and its Course intersects with an Asteroid body:



Subtract the THRUST (4) from the velocity (9), to give 5. Thus a 5 or 6 must be rolled for the Cruiser to evade the Asteroid – on a roll of 4 or less, exit one Cruiser!!

Note that if the needed number for avoidance is 1 or less, then the ship is automatically able to evade a collision; if the number is greater than 6, then a crash is inevitable!

WHEN ANY SHIP, REGARDLESS OF ITS CLASS, HITS AN ASTEROID THE SHIP IS COMPLETELY DESTROYED. (Ramming a Billion tons of iron at several thousand kilometres per second is not recommended, even in a Superdreadnought).

The implication of this rule is simple – don't try to manoeuvre big ships near Asteroid fields, you'll regret it ...



MOVEMENT OF ASTEROIDS:

If a field of Asteroids or other Planetoids is present on the table, it may either be stationary (ie: all bodies remain in fixed positions on the table throughout the game) or else the field may be moving in relation to the playing area (which is much more fun...!)

If you wish to use a moving Asteroid field, all bodies in the field will move at the same speed, and in the same direction, each turn of the game.

Roll at the start of the game to determine the direction and speed of the field's drift: the direction (Course) should be rolled on a D12, with a D6 used to give the speed of drift in inches (eg: a roll of 4 means all Asteroids will drift 4" each turn).

The movement of the Asteroids is carried out each Turn, AFTER all players have written their Movement Orders but BEFORE any ship models are actually moved.

Please note that if an Asteroid moves into or through a ship, this counts as just the same as if the ship was moved to intersect with the Asteroid, and is resolved in the same way.

Note that Fighter Groups, if used, can ALWAYS avoid collisions with Asteroid bodies, but may also use them to 'hide' behind just as ships can.

OPTION:

The normal rules assume that Asteroids cannot be destroyed by weapons fire (or even by ships impacting with them). However, you MAY give each Asteroid a large Damage Point value (perhaps 50 for a very small chunk, 100 for a larger one, etc.) and then allow players to fire on them. When an Asteroid is reduced to zero damage, it disintegrates into, say, 1D12 smaller chunks, which all move at random Courses and speeds out from the point of destruction. Try to avoid THAT lot...

NON-FTL SHIPS:

Although most ships in the game are considered capable of FTL travel between star systems, there are many possible classes of Non-FTL capable vessels which operate entirely within a single star system: typical examples are in-system Freighters, System Defence Ships and Monitors (large, low-Thrust weapon platforms designed for Close Orbital Defence).

Non-FTL craft are designed in exactly the same way as FTL starships, except that (obviously) they do not have to pay Points Cost for the FTL drive. In addition, they may be equipped (in the case of Military ships) with up to **75%** of their MASS in weapons and systems, instead of the **50%** allowed for FTL warships.

Merchant Non-FTL ships may still only carry up to **10%** if their MASS as weaponry/systems, as for FTL-capable Merchants; their only saving is the cost of the FTL system.

As an example of Military Non-FTL ship design, say we are building a System Defence Ship based on a Destroyer-size hull (MASS = 14). The ship will have the same Damage Points as a normal Destroyer class starship, ie: 7, but instead of only being able to mount 7 MASS of weaponry our SDS may carry up to ELEVEN MASS (75% of 14, rounded up). We can therefore outfit it with one 'A' Battery and three 'B' Batteries instead of the two 'B' and one 'C' that the FTL-capable Destroyer carries, while still retaining the two PDAF systems. Alternatively, a Level-1 Screen could be mounted in place of the 'A' Battery, giving a better-protected ship that still carries respectable fire-power. To cost the ship (based on the initial fit of 1 x 'A', 3 x 'B' and 2 x PDAF) gives us a Points Cost of 28 for the hull, 21 for the Drives (assuming the same Thrust rating of 6), and 46 for the weaponry, for a total of 95 Points: a little more than the FTL Destroyer, but for a ship that is MUCH more effective in battle.

For obvious reasons, the use of Non-FTL ships must be carefully controlled in one-off games, otherwise everyone will use them! They should be restricted to the Planetary Defence Forces of relatively large or important Colonies or Core Worlds, where they can be supported and maintained



by local facilities – small settlements and outposts will have to rely on starships that can return to Naval bases in other systems when they require maintenance.

FTL TUGS AND TENDERS:

There are times when ships are unable to travel in FTL drive under their own power, but still must be moved between star systems: obvious examples are System Defence Ships being transferred between duty stations, and starships that have suffered Drive damage and loss of FTL capability, which can only be repaired at a major Naval facility.

For jobs such as these, most forces use FTL Tugs or Tenders, which are ships with massively over-powered FTL drives, capable of extending their drive field around another ship and 'carrying' it through FTL Space.

A Tug or Tender can be of any desired MASS within normal limits, and is generally considered to be a MERCHANT class ship. (Note on terminology: a TUG is normally a ship designed to recover other large vessels, while a TENDER is more commonly a transport for several smaller ships such as light System Defence Ships).

A Tug or Tender can transport up to its own MASS in other ships; ie: a MASS 50 Tug could recover a Battleship (MASS 48), while a Tender of MASS 60 could carry up to three MASS 20 System Defence Ships.

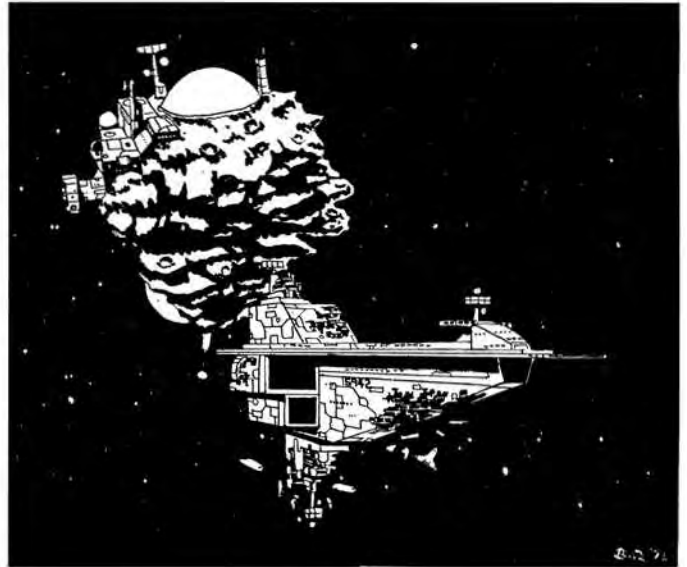
When building a Tug or Tender, its Hull, Normal Space Drives and other systems are costed as for a Merchant ship (it also receives the Merchant's standard 25% MASS as Damage Points, and the maximum 10% MASS in Weaponry), but the FTL drives cost THREE TIMES the total MASS of the ship (ie: three times the usual FTL cost). Thus the MASS 50 Tug mentioned above would have to spend 150 Points on its FTL systems.

The main use for Tugs and Tenders will be in Campaign games, for moving System Defence Ships around the map and for recovering crippled starships for repair; it is unlikely that a Tug or Tender would ever be risked in combat, but of course there is always the possibility of a scenario concerning the attempted recovery of a damaged ship in a hostile star system, or a surprise attack on a recovery mission!

STARBASES AND OTHER INSTALLATIONS:

Some games and scenarios may call for the use of Starbases, Orbital Defence Installations and similar non-powered space constructs. As the possible sizes and designs of such installations are so varied, the rules that follow are simply guidelines to allow you to design and use such equipment; if you really want to build something like the Death Star you'll have to work out the stats yourself! Generally, Bases and Installations can be treated like Asteroids for purposes of movement – ie: they can be either fixed (stationary relative to the play area) or can be moving on a pre-determined course and speed each turn (see Asteroid rules, pages 25-26).

The MASS of such installations can be virtually anything – large Starbases will have MASS ratings of several hundred



with Damage Points to match. Most Installations can be considered as unpowered ships and outfitted with weapons/systems accordingly, using the warship rules and formulae for Military stations and the Merchant rules for civilian/scientific bases and habitats. All systems fitted must be paid for in the normal way, including the overall 'hull' cost, but of course you do not have to pay for any FTL or Normal Space Drives. The lack of Drives does NOT mean that there is more MASS available for weaponry: a Defence Station of (say) MASS 200 will still only mount up to 100 MASS of weapons/systems, the other 50% being taken up with living accommodations, docking bays, life support and all the rest. Installations may mount Screen systems just like ships, and may carry any weapon system in the rules, including Fighter Groups.

For a Record Sheet diagram of an Installation you may either draw out your own diagram, or use two or more Capital Ship boxes on a standard Ship Record Sheet. Of course, the Installation requires no Movement Orders!

Ships may, if desired, dock with Installations – though this is unlikely to be done during combat. To accomplish a docking, the ship's Movement Orders must be planned so that it ends up within 2" of the Installation at the end of the Turn; if the Installation is stationary, the ship must also come to a dead stop within 2" in order to dock. In the case of a moving Installation, the ship must exactly match both Course and velocity with the Station at the end of the turn. On the following Turn, the ship may be taken as docked with the Installation; one full Turn is also required to 'cast off' and undock again, after which the ship may manoeuvre away from the Installation as normal.

While a ship is docked to an Installation, the ship may be fired on as normal UNLESS it is actually docked INTERNALLY (some very large Stations will have bays large enough to take smaller vessels); an externally-docked ship is, however, protected by any Screen systems that the Installation has while it is docked. A ship docked to an installation, internally or externally, CANNOT fire any of its own weaponry OR operate its own Screens.

TYPICAL INSTALLATION TYPES:**1) MILITARY SYSTEM DEFENCE INSTALLATION:**

MASS 200, Damage Points 100, MASS available for weapons/systems = 100. Normally equipped with Level-3 Screens and at least 4 Fighter Groups, plus a powerful mix of Beam and Torpedo weaponry.

2) ORBITAL RESEARCH STATION: MASS 160, Damage Points 40 (25% MASS, as per Merchants), MASS available for weapons/systems = 16. Usually carries Level-1 Screen plus some defensive weaponry.

3) STARBASE: (Typical small Orbital facility for Minor Colonies): MASS 400, Damage Points 100, MASS available for weapons/systems = 40. Well-equipped with Screens and defensive ordnance; often able to dock 2 or 3 ships of up to MASS 20 in internal bays. May carry one or two Fighter Groups for local defence.

3D, OR NOT 3D ...?

Some starship combat games have, in the past, made attempts to simulate 3-Dimensional movement and combat, with varying degrees of success. Indeed, a number of users of the First Edition of FULL THRUST have sent in interesting ideas and methods of applying 3D effects to the game. While many of these ideas do actually work, it is the Author's personal view that the added complication of attempting 3D actions is not really worthwhile; the end result can too often be visually confusing, hard to follow and so slow as to remove one of the major elements of the game – Having Fun!

In an aerial combat game, the third dimension (height) is vital, because atmospheric craft behave differently in the vertical plane than they do in the horizontal. Once you move into space, however, all the dimensions are essentially the same – thus very little is lost 'compressing' the game to only two dimensions, and a great deal is gained in the way of simplicity and playability. By all means continue to experiment with 3D play, and keep sending your ideas in, but we are not including any 3D rules in this Edition.

'Q' SHIPS:

The Q Ship is a specially outfitted 'dummy' Merchant, which is actually fitted with offensive weaponry instead of cargo. Q Ships are sometimes used as decoys, to lure either Pirates or enemy Raiders into attacking what looks like a fat, juicy (and undefended) Freighter; once the Raider is committed to battle, the Q Ship reveals its true nature and proceeds to beat the **** out of the would-be attacker.

To design a Q Ship, follow the same procedure as for a normal Merchant of the same MASS, except that Drives may be bought for the same costs as Military vessels (which means that although very large Q Ships are still no more manoeuvrable, those of Cruiser-type MASS or smaller may afford much more efficient Drives).

Additionally, the ship may be fitted with up to HALF its MASS in weapons/systems, exactly as for a warship, and any of the various Military weapons and defensive systems are available for use. The Q Ship still retains the hull of an ordinary Merchant, and thus only has 25% of its MASS in Damage Points rather than the 50% of a true warship.

To all sensors, the Q Ship appears a normal Merchant vessel; its true nature is revealed ONLY when it wishes to use some of its weaponry, or if it begins to exhibit manoeuvre abilities that should be outside the range of such a ship!

Q Ships may carry Active Sensors as used on Military ships, but of course the use of them will reveal that it is not all that it seems.

THE 'MOVING TABLE' AND DISENGAGING FROM BATTLE:

In the Core rules section there is mention of ships leaving the edge of the table or playing area, and thus leaving the battle. However, as space does not actually have edges, it really should be possible for the entire battle to 'move' off the edge of the playing area and still continue – this may happen if both sides are moving in the same general direction, eg: in a pursuit-type scenario. If you find that all ships in the action are starting to get very close to one end or side of the table, it is a simple matter to move EVERY ship and object in play a certain agreed distance back towards the opposite table edge; effectively you can think of it as 'extending' the playing area under the ships (all things are relative, as someone once said) – the result is the same as the old boardgame trick of picking up a vacated section of a multi-part map and transferring it over to the other side of the map.

If you use this idea in a game, it will become possible to continue pursuit of a fleeing enemy; under the basic rules a retreating force simply had to leave the table in order to break off combat, but with the 'moving table' the pursuit may go on until one side either catches or outruns the other.

Particularly when playing Campaign games, which for obvious reasons are very seldom fought 'to the death', it is advantageous to be able to disengage from battle if things are going badly for you – saving your remaining ships for the next engagement can be much more important than going out in a heroic blaze of glory.

If one player decides he wishes to disengage, it is possible to actually play out the full pursuit stage as described above. If, however, this is felt to be too time consuming there is an alternative abstract method that may be used:

The disengaging player must move ALL his ships OFF THE TABLE via the SAME table edge; until his last ship has left the table, the battle will continue as normal. When all his ships are off the table edge, each player rolls a D6; if one player has any ship that has a HIGHER Thrust than ALL of his opponent's ships, then he adds 2 to his die roll – for example if the disengaging player has some Thrust 8 Escorts, while his opponent has nothing with a Thrust above 6, the former adds 2 to his roll.

If the final total of the player who is trying to disengage is EQUAL TO OR HIGHER than his opponent's roll, he has successfully disengaged and is safe from pursuit. If, on the other hand, his opponent's roll is HIGHER, than the pursuing player may, at his option, elect to continue pursuit – in which case the game continues with a new set-up, as a 'stern chase'. The fleeing player may then attempt the disengagement again if he can reach and leave the opposite edge of the 'new' playing area.



SHIP DESIGN AND POINTS COSTS:

Most players will probably run their first few games using just the Basic ship types for which specifications are given on pages 14-15. Sooner or later, however, many of you will want to start modifying the designs provided, or else designing your own ships from scratch – experimenting with different weapons fits, hull sizes and so on.

Ship design is all about a balance between the three essential factors: Mobility, Firepower and Protection. Mobility is represented by the Thrust rating available to the ship, Firepower by the amount and types of weapons carried and Protection by the level of Screens used (if any) and the overall MASS of the ship (and thus its Damage Points).

The ship design rules detailed in this section are constructed so that every ship has to be a compromise between the three basic factors; although a 'near-perfect' superfast, ultra-heavily-armed and fully screened ship is theoretically possible, it will turn out to be so incredibly expensive in points cost that just one will take most of your fleet budget! Remember that, especially in a Campaign game, a ship can only be in one place at one time – for most purposes a balanced fleet of lighter craft will be more cost-effective than just a few Superships.

Constructing a ship involves two main considerations: the ship's MASS, which is a measure of its overall tonnage, and its POINTS COST.

The MASS of the ship determines its Class, how many Damage Points it has and how much in the way of systems (weapons, Screens, Fighter bays etc.) can be fitted into the hull.

The COST of the ship is the total of the hull cost, the Drives cost and the individual costs of all the systems that you decide to install; some systems (eg: Weaponry) are "fixed costs" per system (regardless of the size of the ship on which they are being mounted) while Drive systems become more expensive as the MASS of the ships goes up, as, of course, does the cost of the hull itself.

When designing a ship from scratch, the first thing to decide upon is the HULL SIZE; this can be either a 'stand-

ard' size hull taken from the table on page 14, or can be a 'special' size that does not fit into any of the basic ship-class sizes shown.

Once you have chosen the HULL SIZE, this gives you the MASS factor of the ship and also indicates the DAMAGE POINTS that the ship can absorb in combat:

For WARSHIPS (ie: all Military vessels), the DAMAGE POINTS are equal to HALF of the ship's MASS;

For Merchant and Civilian shipping, which have much less in the way of hull strength, compartmentalisation, multiple-redundant systems etc., the DAMAGE POINTS equal only a QUARTER of the ship's MASS.

'STANDARD' AND 'SPECIAL' HULLS:

The list of basic Classes (page 14) gives typical hull sizes for 'standard' ship designs, but when you are designing a ship from scratch there is no necessity to stick to one of these basic hulls; it is quite permissible to select a hull size that does not correspond with a standard ship, and these are referred to as 'special' hulls. A special hull may be of any desired MASS, up to a maximum MASS of 100 for actual ships (though some non-mobile installations, Base Stations and such may have a MASS rating of much greater than 100).

The general Classification of a special hull for a Military ship is determined as follows:

Ships of up to MASS 18 are classed as ESCORTS;
Ships from MASS 19 to MASS 36 are CRUISER Classes;
Ships of MASS 37 and up (to MASS 100) are CAPITAL SHIPS.

For Merchant craft, which all fall into the same general Classification and use the same costing system regardless of their size, hulls may be of any size from MASS 2 up to MASS 100.

(Note that when outfitting a Merchant with weapons and systems, any Merchant hull may carry a MINIMUM of 1 MASS of weaponry, even if its TOTAL MASS is less than 10).

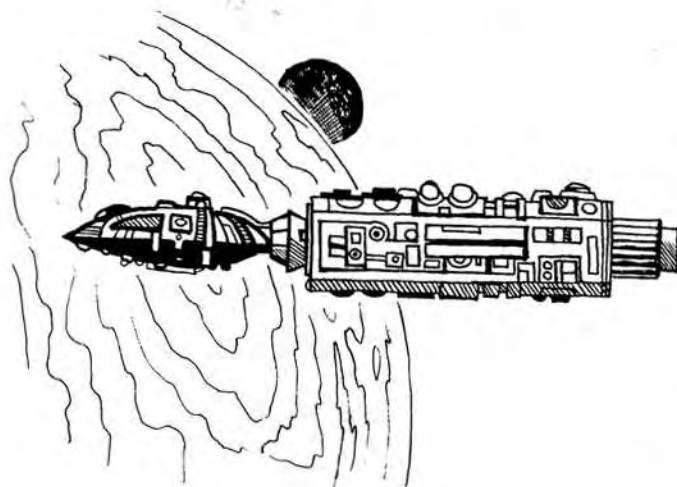
HULL COST:

The COST of the hull in terms of POINTS is dependent on the MASS: all Military ships (warships) have a hull cost of TWICE their MASS, while MERCHANT ship hulls cost 1.5 times their MASS.

Eg: A warship of MASS 20 would have a hull cost of 40 Points, while a Merchant ship of the same MASS would cost 30 Points for the basic hull.

DRIVE SYSTEMS COST:

The next stage is outfitting the hull with Drive systems, both Normal Space Drives and (if required) the FTL 'jump' drives.



Both types of Drive have POINTS COSTS that are based on the MASS of the ship to which they are fitted;

The FTL drive cost is equal to the MASS of the ship, so for instance an FTL unit for a ship of MASS 12 would cost 12 Points.

The cost of Normal Space Drives (those used to drive the ship in-system, and in combat) is dependant on the MASS of the ship and on the required THRUST RATING, ie: how fast or manoeuvrable you want the ship to be. The calculation of Drive cost also varies according to the overall ship size category – whether the ship is of ESCORT, CRUISER or CAPITAL size (or a MERCHANT SHIP).

Drives for ESCORT sized ships cost 1 x ship's MASS per **FOUR** Thrust factors;

For CRUISERS the cost is 1 x MASS per **TWO** Thrust factors;

For CAPITAL and MERCHANT SHIPS THE COST IS 1 x MASS per **ONE** Thrust factor.

EXAMPLES:

An Escort-sized ship with MASS 12 is to be given a Thrust rating of 6: the Drives cost 1 x ship's MASS per 4 Thrust, so for 6 Thrust the cost is 1.5 x MASS, or 1.5 x 12 = 18 Points. To give the same ship a Thrust rating of only 4 would cost 12 Points instead of the 18, and the Thrust rating of 8 would cost 24 Points (ie: 2 x the MASS).

A CAPITAL ship with a MASS of 48 has its Drives costed at 1 x ship's MASS for each ONE Thrust factor, to give that ship a Thrust of 4 would cost 4 x MASS, or 192 Points; to give the same ship a Thrust of just 2 would cost 96 Points.

NOTE: The MAXIMUM Thrust rating allowable on ANY ship, regardless of Class, is 8.

It is theoretically possible to put a Thrust Rating of 8 on a Superdreadnought, but the Drives will cost so much (8 times the ship's huge MASS rating) that the result will be highly non cost-effective; however, if you want to experiment then by all means go ahead!

Please note that the Thrust capability of a ship's Drives costs only in terms of the POINTS COST of the ship; 'better' drives do not take up any more hull space (and thus MASS) than poorer ones, they are just much more efficient.

FITTING WEAPONS AND OTHER SYSTEMS:

Now that your ship is fitted with its Drive systems, it is necessary to equip it with your choice of the various offensive and defensive systems that are available. Unlike the Drives, all the weapons and other systems each have a fixed POINTS COST (ie: NOT related to the ship's MASS or Class) and also have a 'size' given in terms of MASS factors, which are used to determine how many systems (and which types) can be fitted to any given hull size.

All warships may carry weapons and other systems equal to HALF the ship's MASS factor; eg: a ship of MASS 12 could carry up to 6 MASS of weapons and systems – perhaps a 'B' class Beam Battery at 2 MASS, a Needle Beam also at 2

MASS and two PDAF systems at 1 MASS each, thus using up the available 6 MASS.

Once you have decided how you are going to allocate the available MASS for systems, then work out the actual COST of the systems in terms of Points cost and add this to the running total of hull cost and Drives cost.

When designing a MERCHANT SHIP, only ONE TENTH of the ship's MASS is available for fitting weapons and systems. There are also strict limitations put on the kind of systems that Merchants may carry: only 'C' class Batteries, PDAF systems, Level-1 Screens and Submunition Packs are available to Merchant shipping, all other systems being purely Military in nature.

SHIP DESIGN EXAMPLE:

Say we wish to design a ship that will be a slightly heavier version of a standard Heavy Cruiser, but not quite up to the size of a Capital Ship class. The maximum hull MASS for a Cruiser is 36 (the standard Heavy Cruiser is MASS 32), so we choose to use this maximum MASS; the hull is thus a 'special' hull of MASS 36.

The cost of this hull will be twice its MASS in cost Points, ie: 72 points. The DAMAGE POINTS of the ship will be 18 (half the MASS), and there will be 18 MASS (also half the hull size) to allocate when fitting weaponry etc.

We now have to allocate DRIVES to the hull: the ship is to be FTL-capable, so an FTL drive is required which costs 1 x the MASS of the ship, ie: 36 Points. For the Normal Space Drives, we decide a Thrust rating of FOUR is desirable, to give the ship the same manoeuvrability as a standard Heavy Cruiser.

Cruiser Class Drives cost 1 x MASS per TWO factors of Thrust, so a Thrust of 4 will cost us TWICE the MASS, ie: 72 Points.

Now that the hull is costed and fitted with Drives, we must

SYMBOLS FOR WEAPONS FROM ADVANCED RULES

	DIRECTION OF FIRE →
NEEDLE BEAM	
PULSE TORPEDO TUBE	
MINELAYING SYSTEM Three Mines – Delete as deployed	
MINESWEEPING SYSTEM	
SUBMUNITIONS PACK Single shot system	
SPINAL MOUNT NOVA CANNON	



MASS VALUES AND POINTS COSTS FOR WEAPONS AND SYSTEMS:

Type of System:	MASS	POINTS COST	NOTES/COMMENTS:
Class 'A' Battery	3	4 Points, + 3 per arc ¹	¹ Add points for each Fire Arc through which that Battery can bear, INCLUDING the first arc. (eg: 'B' Batt. bearing through 2 arcs costs 3+2+2 = 7 points).
Class 'B' Battery	2	3 Points, + 2 per arc ¹	
Class 'C' Battery	1	2 Points, + 1 per arc ¹	
PDAF System	1	3 Points	² eg: Level-2 Screens cost 6 MASS and 50 Points. Carriers and D/Noughts only.
ADAF System	3	10 Points	
Screen Generators	3 per level ²	25 Points per level ²	
Fighter Group including bay	6	20 Points.	CAPITAL SHIPS ONLY!
Needle Beam	2	6 Points.	
Pulse Torpedo Tube	5	15 Points.	
Spinal-Mount Nova Cannon	16	50 Points.	
Submunition Pack (1-shot)	1	3 Points.	
Minelayer including 3 Mines	3	10 Points.	
Minesweeper System	5	20 Points	
Extra Fire Control systems ³	3	10 Points	

³ Additional to those fitted to Classification as standard:
ie: 1 for Escorts, 2 for Cruisers,
3 for Capital Ships .

decide how to outfit it with weapons and systems, up to the limit of 18 MASS.

A Level-1 SCREEN system is chosen, at 3 MASS and a cost of 25 Points;

To protect the ship against Fighter attack, 3 PDAF Batteries are fitted next, each taking up 1 MASS and costing 3 Points.

We are now left with 12 MASS for OFFENSIVE weaponry,

having used 6 MASS already on DEFENSIVE systems; for maximum long-range firepower, we shall choose 2 x Class 'A' Batteries at 3 MASS each, and three 'B' Batteries at 2 MASS each. To make maximum use of this armament, all Batteries will be mounted to fire through 3 arcs: Port, Fore and Starboard; thus the 'A' Batteries will each cost 4+3+3+3 = 13 Points, and the 'B' will cost 3+2+2+2 = 9 Points each.

Listing all the items decided on gives us MASS and COST totals as follows:

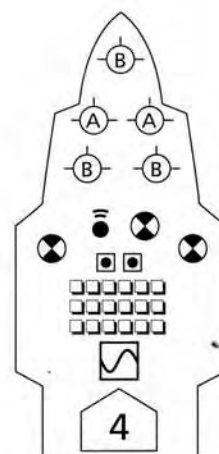
HULL: SPECIAL, MASS 36.

DAMAGE POINTS = 18,

MASS available for weapons/systems = 18

	MASS USED	POINTS COST
HULL COST:	—	72
FTL DRIVE	—	36
Normal Space Drive:		
Thrust rating 4:	—	72
Level-1 SCREEN	3	25
PDAF systems x 3	3 (1 each)	9 (3 each)
'A' Batteries x 2 (covering 3 arcs)	6 (3 each)	26 (13 each)
'B' Batteries x 3 (covering 3 arcs)	6 (2 each)	27 (9 each)
TOTALS:	18 MASS	276 Points

So our final 'Superheavy Cruiser' design has a MASS of 36, can take 18 Damage Points and costs a total of 267 Points.



SUPER HEAVY CRUISER
267 POINTS

THE ADVANCED SCENARIOS

Both of the scenarios described in this section are set against the background of the continuing Third Solar War between the New Anglians and the Eurasians, but they are designed to be representative, stand-alone games that can be played using any background and forces that you wish; they should also serve as guidelines for creating your own Scenarios.

Scenario A: The Attack on Convoy 990:

This is a typical Convoy Action: the Eurasian player has a small convoy of three Merchant ships, escorted by a few warships, which has just left orbit around Gagarin bound for Chiang. Before it can reach the safe FTL 'Jump' distance out from the star's gravity well, the Convoy detects a hostile force dropping into Normal Space on the edge of the Jump Limit; the Convoy and its escort must try to reach the safe jump distance and enter FTL before the attacking New Anglian strikeforce can destroy the Freighters and their precious cargoes.

The Anglian player must try to destroy or damage as much of the Convoy and cargo as possible before the Eurasians reach the Jump Limit – he must then make himself scarce before the System Defence units from Gagarin can reach the position and make things difficult for him!

Set-Up:

A reasonably large playing area is best for this action. The Eurasian Convoy enters from one end of the table on turn 1, with all ships at velocity 6; with the low Thrust ratings of the Freighters, even if they accelerate constantly they will still take several turns to cross the table. The far end of the table is the Jump Limit – any ships that the Eurasian player can move off the table at that end are assumed to have gone into FTL and escaped (note that no ships may attempt to enter FTL while on the table in this scenario – as they are inside the 'Safe Jump' distance such an attempt would be certainly fatal).

The Anglian ships also enter the table on turn 1, from one corner of the table end opposite the Eurasian entry point.

The velocity of the Anglian ships is up to the player to decide – he needs to engage the Convoy quickly, but if he comes at it too fast he may well overshoot it altogether!

Victory Conditions:

The Eurasian player wins if he can get TWO or more of his Freighters off the table and into FTL Space; the Anglian player wins if he can either destroy TWO of the Freighters or cripple them so they are unable to enter FTL. The Anglian force must also achieve its objective without excessive losses, however – if it loses more than TWO of its own ships during the action, the game is considered a Draw even if the Eurasians lose two Freighters.

The Forces:

Eurasian Player: 3 standard-type Heavy Freighters:

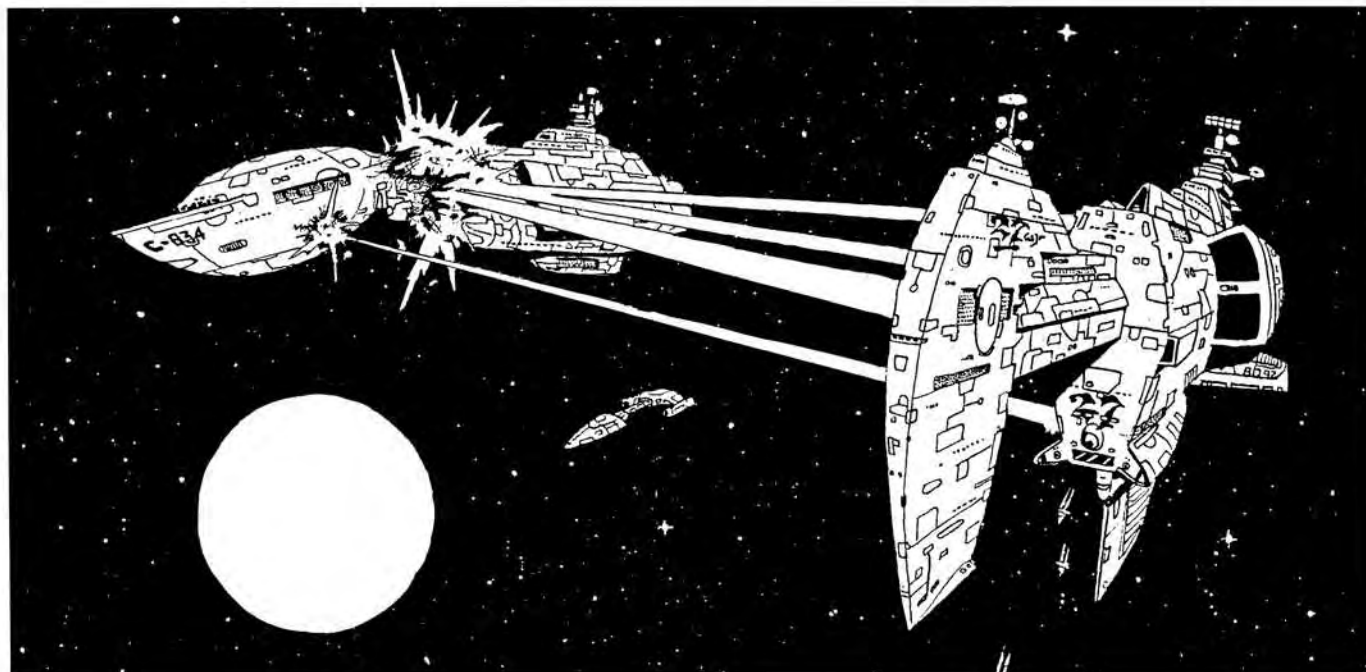
MASS 60, 15 Damage Points, Thrust rating 2. Fitted with Level-1 Screen and 1 x 'C' Battery (3-arc fire), plus 2 x PDAF systems.

Escorting ships: One **Escort Cruiser**, MASS 26, 13 Damage Points, Thrust rating 4; fitted with Level-1 Screen, 3 x 'B' Batteries (3-arc fire), 1 x ADAF and 1 x PDAF.

Two **Destroyers**, MASS 14, 7 Damage Points, Thrust rating 6. Fitted with 2 x 'B' Batteries (3-arc fire), 1 x 'C' Battery (3-arc fire) and 2 x PDAF.

New Anglian Player: One **Heavy Cruiser**, MASS 32, 16 Damage Points, Thrust rating 4. Fitted with Level-1 Screen, 1 x 'A' Battery and 3 x 'B' Batteries (all 3-arc fire), plus 1 x ADAF and 1 x PDAF.

Three **Missile Destroyers** (specialised versions of standard Destroyer Class), MASS 14, 7 Damage Points, Thrust rating 6; fitted with 1 x Pulse Torpedo Tube (forward fire only), 1 x 'C' Battery (3-arc fire) and 1 x PDAF.





Scenario B: Mining Station CON-AM 12:

This scenario brings into play the rules for Asteroids and Space Installations. Con-Am 12 is a Mining Installation floating in the dense Asteroid belt of the Alicia system. During the war the Station has turned most of its output to heavy elements vital to the Anglian economy; a small Eurasian strike unit has entered the Alicia system to try and destroy the Mining Station, only to discover on emergence from FTL that Anglian warships are present to defend the Station against just such an attack.

Set Up:

A number of Asteroid models or markers are required for this scenario, plus a model or counter for the actual Station itself.

Roll 1D6 and add 4 to the score; this is the number of Asteroids that will be present on the table during the game. Initially it is suggested that players use non-moving Asteroids, the Installation also being stationary, but if they wish the rules for MOVING Asteroids and Installations may be used to make play more challenging and dangerous!

The players take turns to place the Asteroids, one at a time, on the table until all have been positioned; the only limitation to this positioning is that no Asteroid may be closer than 12" from any other Asteroid, or any Table edge. After all the Asteroids are placed, the Anglian player locates the Station, again at least 12" from any table edge or any other body on the table.

The Anglian player may now deploy his ships on the table,

all ships being WITHIN 12" of the Mining Station. All of the Anglian ships start the game stationary (i.e. velocity 0).

The Eurasian attack force enters from the table edge furthest from the Station's position, on Turn 1, at a velocity of 10 for all ships.

Victory Conditions:

The Eurasian player wins the game if he can destroy the Mining Station altogether. If he can cause at least 30 points of damage to the Station the game is considered a Draw. The Anglian player wins if he can destroy or drive off the Eurasians without such damage being inflicted on the Station.

The Forces:

Anglian Player: Mining Station Con-Am 12: MASS 200 Civilian Installation, 50 Damage Points; fitted with Level-1 Screen and 2 x 'C' Batteries (ALL arc fire), plus 3 x PDAF systems.

Defensive Forces: Two **Light Cruisers:** MASS 22, 11 Damage Points, Thrust rating 6. Fitted with Level-1 Screen, 3 x 'B' Batteries (3-arc fire), 2 x PDAF.

Three **Frigates:** MASS 10, 5 Damage Points, Thrust rating 6; fitted with 1 x 'B' Battery (3-arc fire), 1 x 'C' Battery (3-arc fire) and 2 x PDAF.

Eurasian Player: One **Battledreadnought:** MASS 60, 30 Damage Points, Thrust rating 2. Fitted with Level-2 Screens, 1 x Fighter Group, 4 x 'A' Batteries (2-arc fire), 1 x 'B' Battery (3-arc fire), 4 x PDAF.

Three **Destroyers:** MASS 14, 7 Damage Points, Thrust rating 6. Fitted with 2 x 'B' Batteries (3-arc fire), 1 x 'C' Battery (3-arc fire), 2 x PDAF.

AUTHOR'S NOTE:

The Campaign rules presented here are, of necessity, just an outline of the subject. To provide a truly 'complete' system of Campaign rules, including Economic Factors, Resources, Shipbuilding, Ground Combat and everything else that goes along with it, would require an entire book devoted to the subject. Limitations of space in this publication preclude the inclusion of more than the basic rules for 'linked' games which are detailed over the next few pages.

We hope to publish a Sourcebook/Supplement sometime in the future that will expand the Campaign rules considerably, and also go into much more detail on the background material, of which the brief outline given here is again only a taster. Please feel free to send in any ideas and suggestions that you have on expansions to the Campaign systems, plus and further developments to the background – all input will be gratefully received and may well be used (with appropriate credits) in future publications.

CAMPAIGN GAMES: INTRODUCTION

The Campaign game is actually a series of table-top battles, fought with an overall objective in mind. A map of the area of space in which the Campaign takes place is required, on which the player's ships are moved (via FTL drive) in Fleets; it is only when two or more Fleets actually occupy the same star system at the same time that play is transferred to the game table and a battle is actually fought.

One important factor of the Campaign game is that each player or team of players starts off with a certain size of overall force, either being provided with a ready-generated selection of ships or else allowed a 'budget' of Construction Points from which to design their own ships. This force must then be distributed around the map according to the player's objectives and any requirements of the scenario.

Each Campaign will be very different and so will its objectives and Victory Conditions; players are encouraged to write their own Campaign scenarios, as this creative process is often more than half the fun of gaming!

THE CAMPAIGN MAP:

The star map for the Campaign should contain a number of systems around which the action of the Campaign will centre. A hex-gridded map is the easiest to use, and the suggested scale is 1 hex = 1 Light Year. Refer to the map provided with the Campaign Scenario (page 37) for an example.

Movement of fleets (groups of FTL-capable ships) on the map can be either drawn directly onto the map, or coloured counters or map pins can be used to represent one 'fleet'. The actual strength of the fleet can be anything from a couple of Scoutships up to a full Dreadnought Battle Squadron – the owning player is the only person who knows what each fleet marker really represents!

Each 'Turn' of movement on the map represents approximately one week, and in that turn each fleet of FTL ships can move up to 6 hexes (or 6 Light Years, if you are using a different map scale) in any direction.

USE OF AN UMPIRE:

If you are fortunate enough to have someone present to act as Umpire for the Campaign, you can use a system of 'hidden movement' of fleets in FTL drive. In this case, each player has his own copy of the map, on which he marks the movement of each of his fleets. At the end of each turn of map movement, all players hand their maps to the Umpire, who compares them to see if any opposing fleets have actually 'met' in a star system – if so, then a battle may take place according to the rules set out below. If there are no conflicts occurring that turn, the Umpire returns the maps to the players and the next turn of map movement is plotted.

The use of the Umpire means that each player does not know where his opponent's fleets are while they are in FTL Space; the first he knows of an impending attack is when the enemy suddenly drops out of FTL in his star system!

Without an Umpire, unless all players trust each other (!)

all map moves must be made visible to the opponent, which removes a little of the confusion and 'realism' of the Campaign, since each player can react to his enemy's moves before fleets actually arrive at their destination. As both/all players are at the same advantage/disadvantage, however, this does not really affect the playability of the games and the use of some 'dummy' fleet counters can help to increase the uncertainty factor!

WHEN FLEETS MEET IN A STAR SYSTEM:

Whenever a turn ends with two opposing fleets occupying the same star system hex on the map, each player must give his opponent **SOME** information about the composition of his fleet in that system: the only data that can be gathered at this point is the Long Range Scan reading, which tells only: 1) how many ships there are in the enemy fleet, and 2) what their basic Classifications are. Reference should be made at this point to the 'Sensor' rules on pages 21-22, as this part of the Campaign system follows the same lines – all the players knows about his opponent is how many ships he has, and roughly what types.

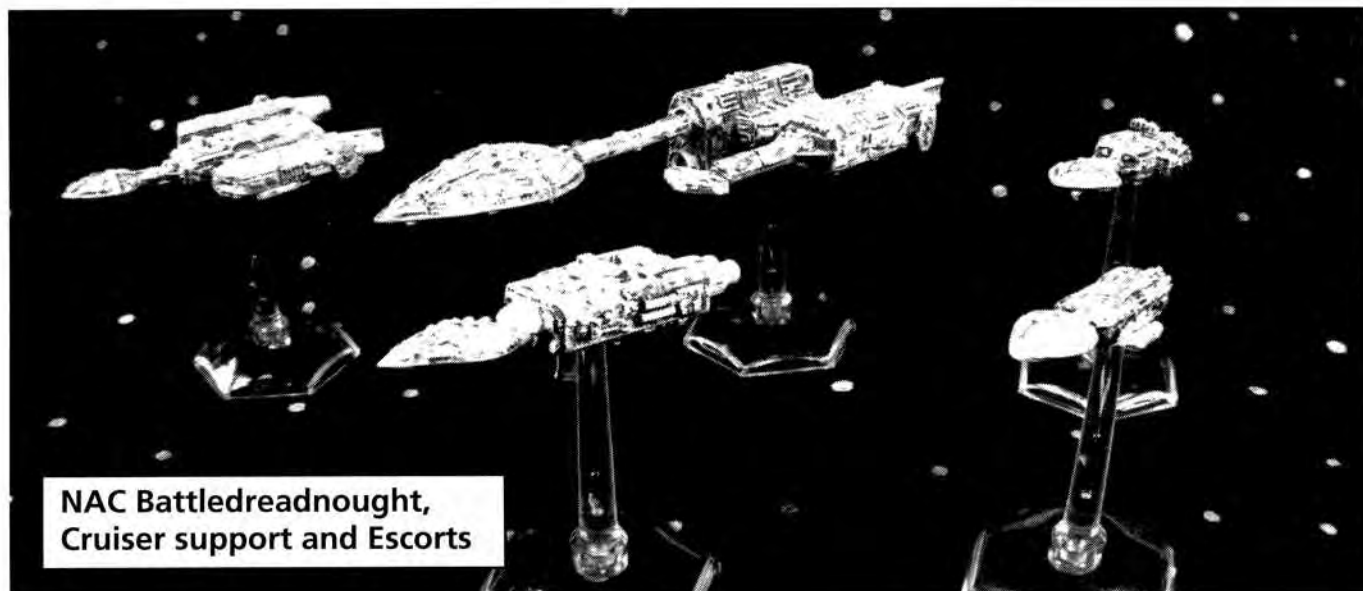
As explained in the rules on Bogeys and sensors, players may (if agreed beforehand) utilise Decoy Drones and/or Weasel Boats to confuse their opponent about the real strength of their fleet.

EXAMPLE:

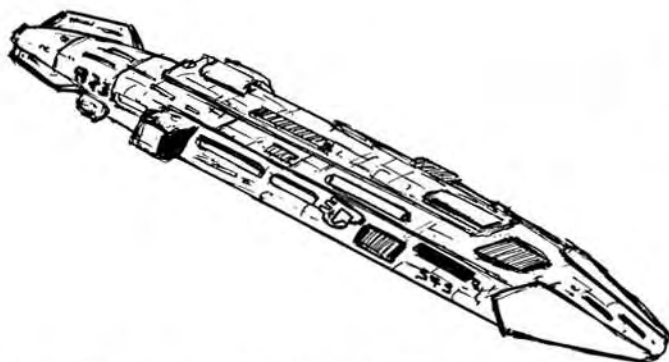
A player has just moved a fleet into a star system already occupied by a fleet belonging to his opponent. Each fleet scans the other with Long Range Sensors, and each player tells the other what the Sensors **THINK** they see:

The newly-arrived fleet actually consists of two Battleships, three Escort Cruisers and two Destroyers, but the player has also deployed four Decoy Drones immediately upon emerging from FTL – he tells his opponent that the scan shows two **CAPITAL**, three **CRUISER** and six **ESCORT** Class contacts.

In return, the player already insystem tells the opponent that his sensors indicate that his forces consist of three **CAPITAL** ships, two **CRUISERS** and four **ESCORTS**; in reality,



NAC Battledreadnought,
Cruiser support and Escorts



the player has three Frigates and a Corvette (the four ESCORT contacts), one Heavy and one Light Cruiser, plus just ONE Battle Dreadnought – the other two CAPITAL contacts are in fact Scoutships acting as Weasel Boats and emitting Capital Class signatures!

On the basis of the Long Range scan information (and how much they decide to trust it...), each player must decide whether he wishes to engage the enemy, or to withdraw from the system without battle. Each must write down (in secret) what they decide to do, and both notes are revealed: if both have chosen to fight then the battle is played out on the table top – using 'Bogey' markers at first, as per the rules on page 21. If neither wish to fight, then BOTH must leave the system on the next map move turn, without ever having discovered exactly what the enemy strength really was. If, however, one player chooses to stand and fight while the other wishes to run, then the player who decided to fight rolls one D6: on a roll of 1-5, the opposing fleet can safely enter FTL and leave the system, but a roll of 6 means that the aggressor has caught the fleeing enemy before he could 'jump', and the battle is fought out after all (of course, the player who tried to run may then apply the 'Leaving the table under FTL drive' rules on page 23 to try and escape if he chooses).

If a battle takes place from which one protagonist then disengages (refer to page 28 for rules on disengagement from combat), the opposing forces are assumed to have separated within the star system for that Campaign Turn. Neither player may claim ownership of the system, and at the start of the following Turn each player must make a new decision as to what action to attempt: whether to rejoin battle, to flee the system or to attempt a Stand Off.

THE STAND OFF:

There is an extra option available to players when they decide whether to engage in battle or not; if a player elects not to fight, he can note that he wishes to try and STAND OFF the enemy; should the opponent then choose to attack, the battle will proceed as normal. If, however, the opponent ALSO chooses the Stand Off option then both fleets remain in the system, simply glaring at each other from a long distance (the original occupant in the inner system, the newcomer on the system fringe). Neither is able to gather more data about the other from this position, and each must make a new choice of action on the next move - though of course either is free to try for a Stand Off again.

Often the Stand Off is a stalemate situation which will only end when one player loses his nerve and withdraws, or reinforcements arrive for one side. It is the equivalent of a

siege on the system, where neither force believes it has sufficient superiority to win in open combat.

CAMPAIGN OBJECTIVES AND VICTORY CONDITIONS:

Any Campaign Game has to have a carefully defined objective (or series of objectives) for each side to try and achieve; basically, victory goes to the player who first achieves his objectives, or has come closest to doing so by the time the game ends. For a simple Campaign, such as the example given later in this section, the objectives can be clear and straightforward: for example, one player has to occupy a certain number of enemy-held systems, while the opponent tries to prevent him doing so, or at least hold on until reinforcements can arrive.

REPAIRS, REPLENISHMENT AND REINFORCEMENTS:

The sort of basic Campaign covered here represents too short a time-span to allow for actual shipbuilding to take place, but there is the possibility of Repairs to battle-damaged ships and the arrival of reinforcements from other areas outside the actual Campaign map.

Most battle damage is quite major, and ships cannot effect repairs themselves other than emergency patch-up jobs to keep the vessel spaceworthy until it can reach a proper repair facility. Certain star systems on the map may be defined as having Naval Bases or other such facilities, which can repair 1D6 worth of Damage Points to any ship per one-week Turn. To undergo repairs, a ship must be in the system containing the repair facility and is assumed to be docked to the repair Installation for the duration of the repairs – it is unable to fight during this time. Repairs may also be attempted to specific systems of a ship (again, only while it is docked at a repair Installation): you may roll for up to three systems on each ship, at your choice, per Turn: on a D6 roll of 3 or more the system in question is repaired and fully functional. Note that Drive systems require TWO successful repair rolls if fully disabled, in the same way as they need two hits to disable them. (Refer to the rules concerning Tugs and Tenders on page 27, for details on the FTL transport of Drive-disabled ships).

Replenishment consists of restocking ships with consumables and expendable ammunition (such as fitting replacement Submunition Packs), and can also include the supply of replacement Fighters (at a sufficiently large facility) to return a ship's Fighter complement to full strength after combat losses. All such replenishment must, like repairs, be carried out at a suitable Naval facility; unlike repairs a ship can be considered fully replenished in one Turn (one week) at such a Base.

If reinforcements are to be allowed to enter the Campaign map area during the game, this must be planned beforehand and allowed for in the player's initial Force Budget, or by special conditions in the Campaign Scenario. In certain scenarios, such as the sample Campaign supplied in this book, the arrival of reinforcements for one side actually signals the end of the Campaign – the enemy has to try and achieve his Victory Conditions before such reinforcements can arrive in the area to foil his plans.

THE LAFAYETTE INCIDENT, 2178.

The Third Solar War between the New Anglian Confederation and the Eurasian Solar Union was characterised by brief periods of heavy fighting both in space and planetside, punctuated by long months of minor strikes and aggressive posturing by both sides.

One of these renewed bursts of combat occurred in early 2178, when a sizeable Eurasian Naval Force left Chiang for a determined push into the Outworld sectors of the NAC, its primary target being the Lafayette system with its extensive industrial colonies and resources.

The Eurasian plan was for the Task Force, under Admiral Illyevich Grisheva, to rapidly defeat the System Defences of Lafayette and at least two of the adjacent settled systems before the arrival of NAC Fleet elements from the Core: if this could be achieved quickly enough, the space superiority in the systems would enable the ESU to ransom the colonies under the threat of orbital bombardment, and therefore stand off any NAC attempts to retake the worlds.

As with most battle plans, however, this one was not destined to stand up to first contact with the enemy. Intelligence information had forewarned the NAC of the impending ESU push; a scratch force of all available fleet units had been hastily assembled at New Toledo under the command of Rear Admiral Sir Arlen Brigstone, a veteran of the Fenris and Nagisa campaigns. Brigstone's mission was to defend the settlements and outposts in the Lafayette sector until elements of the main fleet could arrive to repel the ESU aggression.

CAMPAIGN SET-UP:

The Campaign Map on page 37 shows the sector of NAC space around the Lafayette system. The NAC player (or team of players) must divide his FTL-capable forces between those systems on the map that he thinks the ESU player will try to strike for, to supplement the Non-FTL-capable System Defence forces that are tied to the various systems (it is assumed that no FTL Tugs or Tenders are available in time to move Non-FTL assets between stars).

The ESU player must decide how he can best achieve his objectives within the limited time he has available before the NAC main fleet arrives. He needs to get full space superiority in at least three of the SETTLED systems, one of which must be Lafayette itself. The other stars with settlements are Hudson, Merrill's, Kakisa, New Toledo and Baffin. Rock, VN-459 and HR-1306 each have only small scientific or mining bases present insystem). Achieving superiority in a system requires the aggressor to either destroy, disable or drive out ALL defending warships in that system, so that he may safely assume orbit around the settlement and thus threaten it with nuclear bombardment.

All ESU forces enter on Turn 1, at the point marked 'X' on the map, the NAC forces will already be deployed (and secretly recorded) in any of the star systems on the map.

TIME SCALE AND VICTORY CONDITIONS:

The NAC main fleet units will arrive in the area in SEVEN TURNS (seven weeks of Game Time). If the ESU player can achieve total superiority in at least THREE of the six settled systems, INCLUDING Lafayette, within this time span then he may claim a total Victory. If the NAC player can prevent this occurring until the end of Turn 7, he is deemed the winner. If the ESU forces manage to hold Lafayette and ONE other colony system, or any THREE such systems but NOT including Lafayette itself, then the Campaign should be considered a Draw.

POSSIBLE STRATEGIES:

The ESU player is racing against time. He may try to keep his whole force together and attempt to overwhelm each system in turn with massive firepower, then leave a token force insystem and move on to the next - there is theoretically time to do this providing he keeps moving and does not get delayed in any one system. The risk of this, however, is twofold: firstly any hold-up due to meeting unexpectedly strong defence at any star will mean he will run out of time, and secondly the small forces he can afford to leave behind to garrison the captured stars will be very vulnerable to counterstrikes by NAC forces - the ESU player may very well find his early gains evaporating behind him as he presses on into the sector.

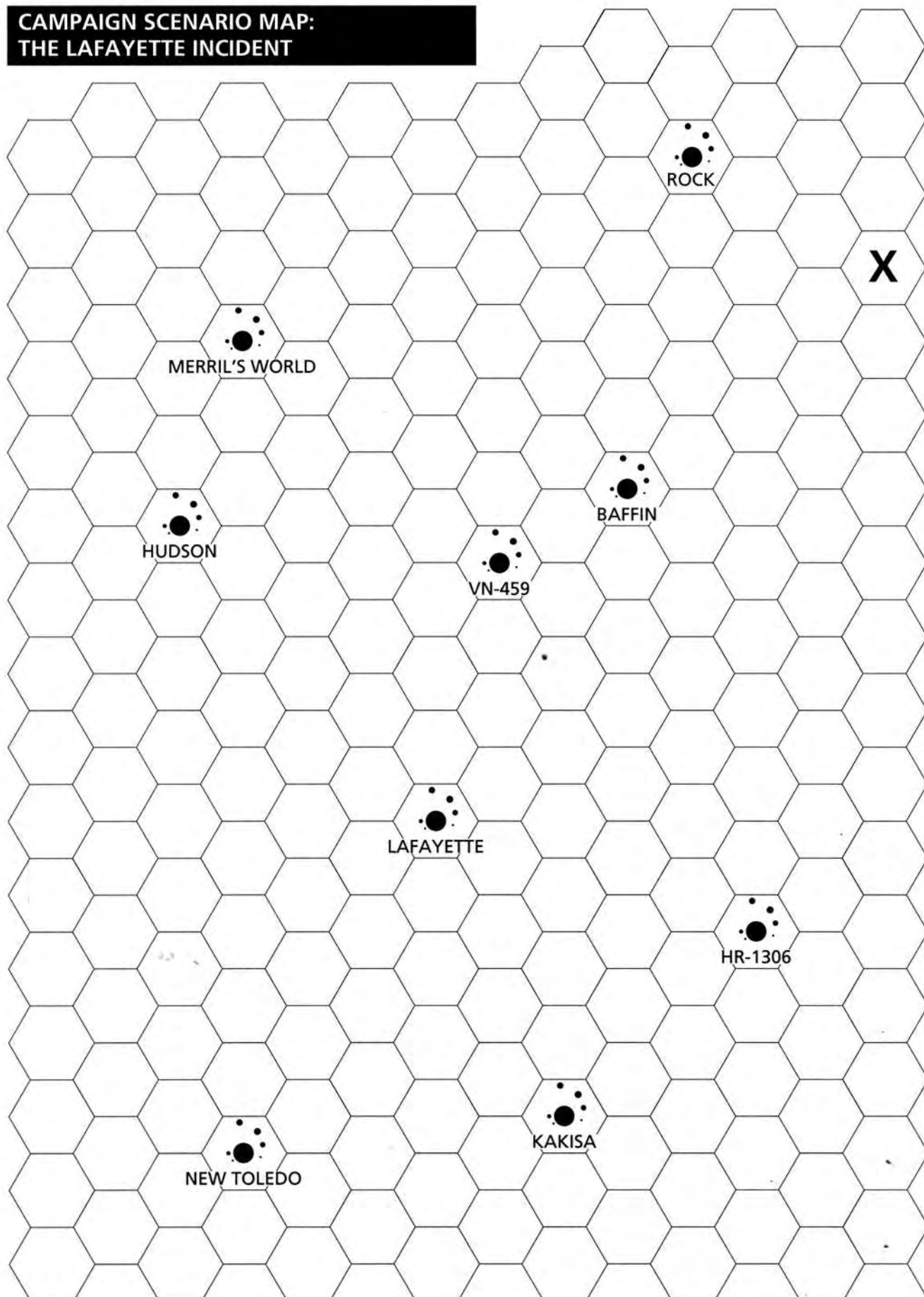
The ESU's main alternative strategy is to split his forces at the start, and make simultaneous pushes towards several systems; this could achieve some quick victories, but of course means that each battle will be more evenly matched.

For the NAC side, his role is in playing a mobile defence and trying to buy time. If the ESU fleet remains in one large force hopping from star to star, the NAC must defend each system as best he can while trying to counter-attack and recapture the systems that the ESU player has already passed, or else take the great risk of committing his entire mobile (FTL) force in one pitched battle with the enemy. Should the Eurasian force split, the NAC Admiral must decide firstly whether the split is genuine (is that a battlefleet heading for Merrill's, or just a Scoutship running decoy while the bulk of the ESU force pushes on to Lafayette?) and secondly how he will divide his forces to react to it.

THE FORCES

Each player must select the ships that will comprise his forces up to the Points totals listed below. All the ESU ships must be FTL-capable, while the NAC forces are divided into the Mobile Force (FTL ships) and the Non-FTL Systems Defences stationed in the settled systems. The Points totals given may be varied if the players desire, according to the size of battles that they want: smaller Points totals (and thus fewer ships per side) will mean that each battle will take less time to play out - alternatively the totals may be increased to give some VERY large table-top engagements!

The ESU Admiral has 10,000 POINTS to build his forces; he

**CAMPAIGN SCENARIO MAP:
THE LAFAYETTE INCIDENT**

has a free selection of all available Ship Classes, the only restriction being that the total NUMBER OF SHIPS (not points value) from any ONE major Classification – ie: ESCORTS, CRUISERS or CAPITAL SHIPS – may not exceed 50% of the total number of ships in the force: For example, a force of 10 Capital Ships, 16 Cruisers and 25 assorted Escorts would be allowed, but one of 8 Capitals, 12 Cruisers and 40 Escorts would not – the Escorts would be over 50% of the total number of ships.

The NAC Admiral may spend up to **6,000 POINTS** on his Mobile (FTL) forces, subject to the same limitation described for the ESU forces above.

In addition, the NAC player has the following 'fixed' System Defence forces stationed in certain systems:

At LAFAYETTE:	1,500 POINTS of Non-FTL ships
At HUDSON:	1,000 POINTS of Non-FTL ships
At MERRIL'S:	800 POINTS of Non-FTL ships
At BAFFIN:	800 POINTS of Non-FTL ships
At NEW TOLEDO:	1,200 POINTS of Non-FTL ships
At KAKISA:	500 POINTS of Non-FTL ships
Rock, VN-459 and HR-1306:	NO insystem Defence Forces

The NAC has a free choice of ship classes to make up his System Defence fleets - refer to the rules for Non-FTL warship design on page 26.

THE LAFAYETTE SECTOR:

The nine star systems that comprise the Lafayette sector of the NAC's Outworld possessions have the following settlements and facilities:

LAFAYETTE: Sector Administrative Capital; First-generation colony of mainly Canadian settlers from Earth. Sizeable community with considerable industrial capacity.

NEW TOLEDO: Small colony, mostly British/American settlement; main Confederation Star Fleet Naval Facility for the sector – has repair and replenishment facilities for fleet ships.

HUDSON and MERRIL'S WORLD: Both second-generation settlements colonised from Lafayette, plus some direct immigration from Earth. Hudson is mainly agricultural, Merrill's has considerable mineral resources in the system's Asteroid belt.

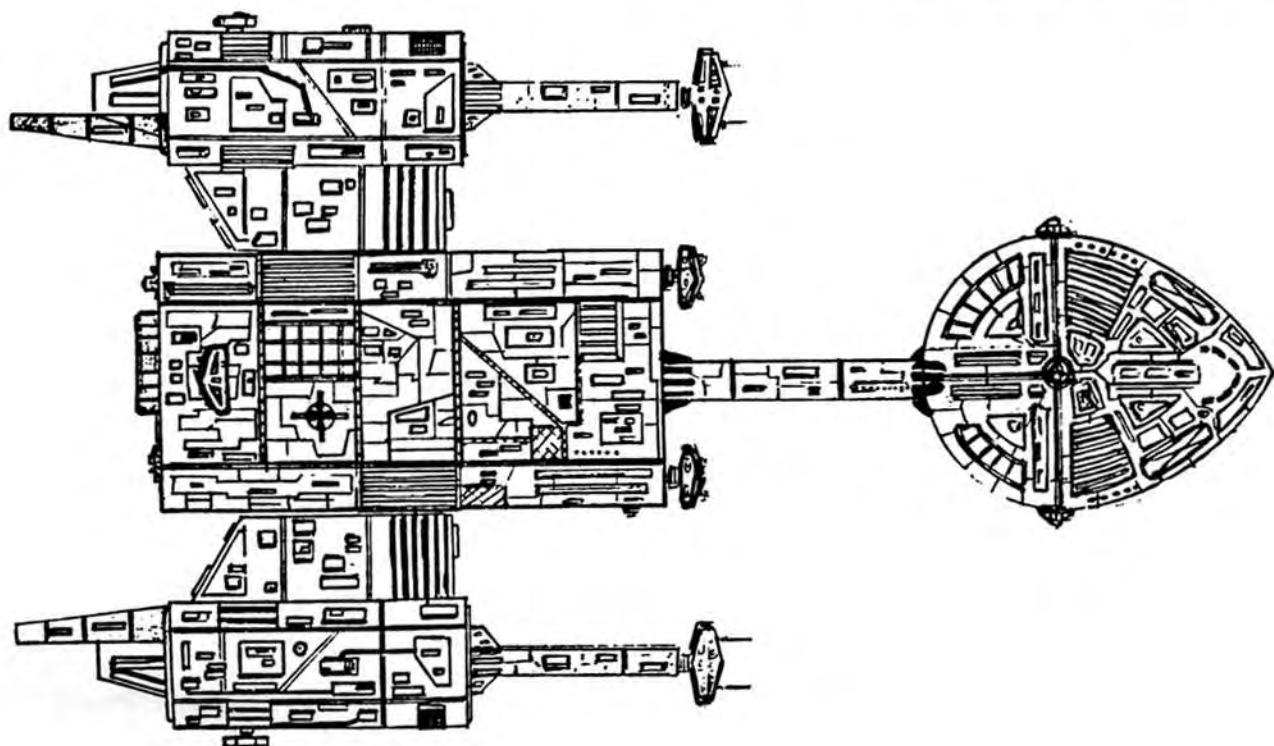
KAKISA: A minor colony but an important one due to extensive heavy element deposits on a moon of the star's gas giant. Its economy is based around the mining.

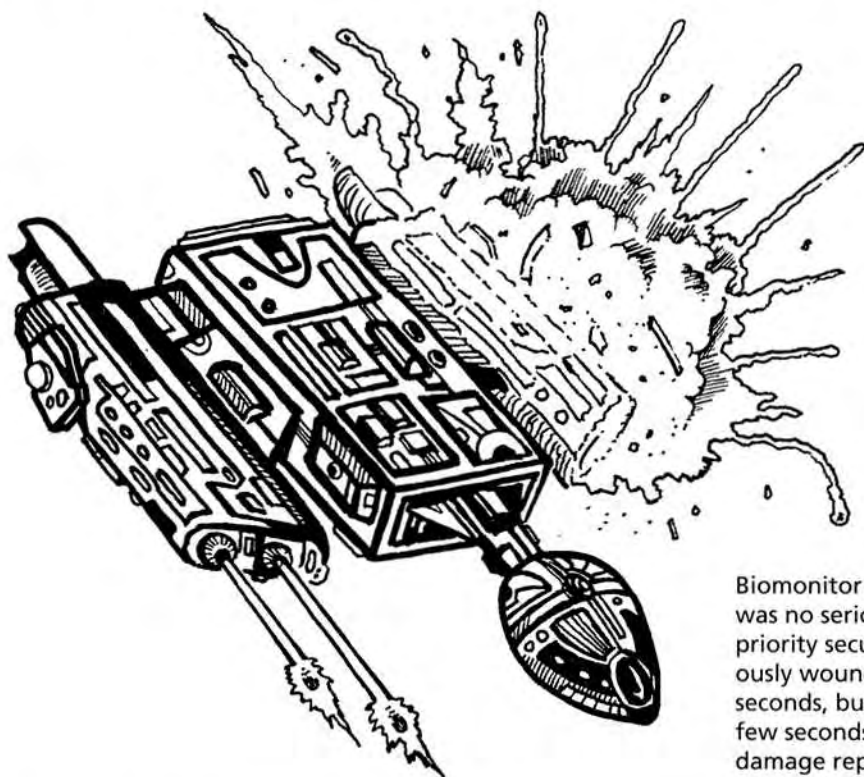
BAFFIN: Fairly high population due to large-scale immigration from Earth and some of the inner colonies. Canadian, Jewish and Japanese communities make Baffin one of the few truly multiracial settlements in the Outworlds.

ROCK: An uninhabited system (except for a small UNSC-sponsored Scientific Base on a moon of the second planet) due to the lack of an even remotely-habitable planet in the system.

HR-1306: Very small scientific community (NAC-owned) on the fifth planet, researching the possibility of future Terraforming of that world for colonisation.

VN-459: Some small independently-owned mining operations on the only non gas giant world in the system, plus a minor NAC Naval Facility on the world's moon – replenishment available here for any fleet ships, but repair facilities are limited and can cope only with ships of up to MASS 20.





Allie Nakamura woke up in Hell

Dull red light glowed through smoke and haze, demonic shadows moved amid flashes of blue and green fire. Someone was screaming. She turned her head slightly and felt a knife of agony in her shoulders; one of the shadows moved towards her.

"Captain.. Ma'am.. are you alright?"

The familiarity of the voice triggered something within Allie's blurred thoughts. Suddenly everything snapped back into place: Captain A. Nakamura, commanding CH-422, Confederation Navy warship CNS Vandenburg. Currently assigned to Task Group Delta, 3rd Fleet, Winchester system. The vision of Hell had, moments before, been her Command Bridge.

The shadowed figure resolved itself into her Scan Exec, Lt. Calver. The haze was from the fire-fighting systems which still hissed and spat irregularly at flickering electrical fires at several consoles; the dim red lighting implied that main power circuits were out. The screaming was still going on....

"Mister Calver – casualty report?"

"Uh..yes, Ma'am. Davison and Gilberg down with induction burns – Farrel is treating them, and there's a Med team on the way when it can be spared. We're getting significant casualty counts in other sections - we got off pretty lightly on the Bridge."

Allie tried to rise, then stumbled as her head whirled. Calver caught her arm and helped her to the Con chair, where she slumped while she tried to clear her mind again. She remembered a heavy impact, the Bridge floor bucking, striking the corner of the Nav console as she fell. The

Biomonitor on her suit would have told Calver that there was no serious injury, so he had taken as his immediate priority securing the Bridge and seeing to the most seriously wounded. She could only have been out a few seconds, but in space combat a great deal can happen in a few seconds... 'All stations, this is the Captain. I need damage reports to my board NOW. Mister Calver, do we have Scan?'

"Most Active systems are down, Ma'am. We've still got capability on Passive Sensors, I'm trying to pin down the hostiles."

"Very good. Put all data through to my screens" – the Main Screen was a smoking ruin on the Bridge wall – "and give me a TacComp projection as soon as you can."

The casualty and damage reports began filtering through from other areas of the ship and Allie's board steadily assembled an overall picture of the Vandenburg's condition. Things didn't look good; major hull breaches in four sections, most of weapons and FireControl off-line, heavy casualties in Engineering – her Power Chief was dead, and the Power 2nd was struggling to bring one of the two fusion cores up again. The other core was dead, dumped by its auto-shutdown fail-safe to prevent the damaged torus destroying the ship. Until they had power to manoeuvre, the Vandenburg was a sitting duck for the Eurasian ships that had already partly crippled her.

A sub-screen lit up with the helmeted face of Reilly, the Power 2nd. Pressure integrity had been restored to the Engineering section, but the crew were still sealed against the choking fumes that drifted thickly from scorched insulation and burning equipment.

"Captain, Reilly here. I think we can get Alpha Core back on-line, but even then we'll only have about fifty percent Drive capability. There isn't a lot left of the Port Thrust module, and we're routing power through back-ups that weren't built for this kind of combat load."

"Thank you, Mister Reilly. I need manoeuvre power in ten minutes maximum, then get at least some of the weaponry powered up. Scan tells me we're going to have company very shortly, and I want to give them a warm welcome..."

THE BACKGROUND AND TIMELINE:

FULL THRUST was written from the start as a GENERIC system, that is, it was not set in any specific 'Future History', but instead provided a rules framework for players to fit into whatever background they preferred – whether from a book, film, another game or just their own ideas.

Although this Edition may still be used in exactly the same way, it was felt that for completeness some sort of background setting should be included as a OPTION. This optional nature cannot be over-emphasised – there is a full setting and 'History' provided here IF you wish to use it. If you prefer to ignore it completely and use your own ideas, then all the better – for too long now gamers have been spoon-fed by certain 'big-name' companies into believing that they should only set their games in the 'Official' universe for that system.

Please treat the background just like any of the Advanced rules; if you like it, by all means use it – if you don't, then write your own, and ignore any ***** who tries to say you're doing it 'wrong'..!

For those who DO like the background provided and wish to set their games in it, the History and storyline will be steadily developed as our other SF rules systems are progressively revised and re-published in similar format to this book, the intention being to combine FULL THRUST, DIRTSIDE (our 1/300 Ground Combat System) and STARGRUNT (25mm Infantry Actions) into one cohesive background. Future rules publications will then be fitted into various points on the Timeline.

MAN'S ROAD TO THE STARS

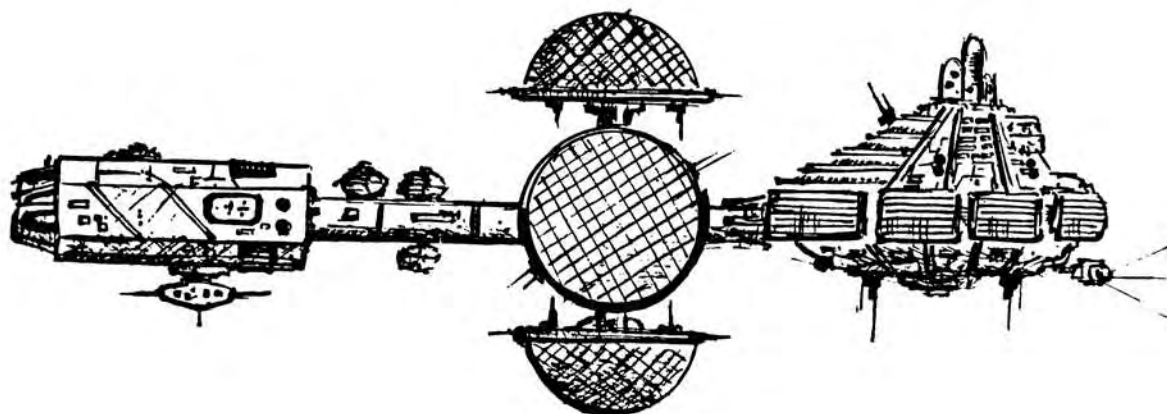
Following the break-up of the former Soviet Union in the early 1990s, the first part of the 21st Century was a time of unprecedented peace for the major countries of Earth. Peace did not necessarily mean prosperity, however, as worsening economic and ecological problems continued to beset many nations; minor confrontations and brushfire wars persisted between the smaller powers despite valiant efforts by the United Nations to maintain stability and mediate in disputes.

By the 2020s, the economies of the USA, the former Soviet States and many of the poorer nations of Europe were looking decidedly shaky. Increasing industrialisation in South America, Asia and parts of Africa began to show dividends for these countries in the World markets, while Japanese technological innovation continued to expand at a virtually exponential rate.

Ironically, one of the most horrific events ever to be perpetrated on mankind by itself was to prove the stepping-stone to its greatest advance. On April 23rd, 2027, the State of Israel was effectively wiped from the face of the World by a series of terrorist-planted nuclear and biochem weapons detonated in or near all of its major cities and military installations. Those areas not reduced to radioactive slag were rendered uninhabitable by fallout and chemical agents, and casualty figures were estimated at 73% within the first twelve hours after the attacks.

The events of 23rd April shook the World, in a literal as well as political sense. No less than fifteen separate Islamic fringe groups claimed responsibility in what they called the 'Final Victory'; the sheer horror of their act seemed to so overwhelm public opinion the World over that the UN was thrown into confusion, unsure of how to react, or who against. Initial cries for massive nuclear retribution gradually died away as it was realised that retaliatory genocide was as pointless as it was globally dangerous. In the end it was the remnants of the Israeli Military and Intelligence services that exacted some small shred of revenge, when the leaders of nine of the terrorist groups responsible were systematically exterminated over the first week of May, regardless of the nations in which they had taken refuge.

As the Jewish peoples of the world began to pull themselves back together, many groups swore oaths of undying vengeance against the forces of Islam; others, however, began to look for ways to rebuild. Their 'Homeland' might be gone, but their Nation lived on in communities scattered throughout the World, as it had lived in their hearts and minds for centuries before. In 2029 the Gilderstein Foundation in New York began a recruitment programme for the greatest mathematicians, engineers and theoretical physicists in the world, offering huge salaries and incentives for the best people. Purchasing a small island off the





Philippines in 2032, the Foundation (with massive technical support and funding from several Japanese megacorporations) initiated its visionary programme – to break free from the confines of the Solar System, and find a world on which to found the New Israel, the second Promised Land.

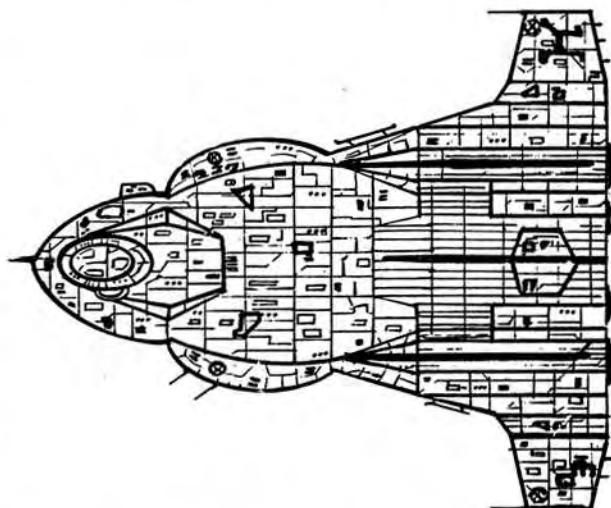
There followed many years of false starts and dead-ends for the Foundation's work, while the economic situation the world over fluctuated wildly. Early in 2045 the Eastern states of the Russian Commonwealth were subject to border incursions from the increasingly hostile Beijing Government, and in 2046 South Korea fell to a lightning strike by North Korean and Chinese forces. Again the UN dithered, its major supporters too busy with worsening internal affairs to actively intervene. The Asian unrest culminated in January 2047 with the Third Russian Revolution, in which a Chinese-sponsored coup returned Communism to several of the states of the Commonwealth and declared the formation of the Eurasian Union. By mid-2047 the only Commonwealth states clinging to freedom were the Ukraine, Byelorussia and the Baltic States, the remainder of the former USSR being firmly in the grip of Beijing.

On the other side of the world, the USA was also faring very badly. The staggering economy finally collapsed in 2049, followed immediately by the downfall of the Federal Government, precipitated by the assassination of President Amy Koslowski in the bombing of the White House by an unknown group. As the US began a rapid descent into anarchy and state feudalism a group of senior officers under Air Force General Parham declared the formation of a military government operated from NORAD headquarters. This apparent 'coup' was violently opposed in many States, and the situation began to deteriorate further towards a second civil war.

In 2050, General Parham requested UN military involvement to quell uprisings in over twenty-six States, but the UN was still preoccupied with the problems in Eurasia and refused direct intervention. Finally the military government turned to Canada and Britain, the latter having been steadily reforging its traditional links with the USA over several years due to its growing disillusionment with the French-dominated European Community. At first the British and Canadian governments were reluctant to become too involved, until September 2050, when separatist elements in Florida carried out a limited nuclear attack on North Dakota. A week later, a large task-force of British and Canadian troops arrived in the US and supported the national military in seizing control of most of the nuclear installations throughout the nation. The pacification of the United States was to take another six years, and led to the formation in 2057 of the Anglian Confederation, uniting the former US and Canada under the British Crown, the office of Lord Governor being established to oversee the rebuilding of the North American economy and industrial base. Despite Parham being the obvious candidate for the post, public opinion and media pressure resulted in Admiral Dewsbury (USN) being appointed as the first Lord Governor in July 2057.

Meanwhile, the Gilderstein Foundation had been continuing its work on its isolated and fortified atoll, seemingly oblivious to the world-shattering events taking place elsewhere. Having moved all its funds to Japanese banks some years earlier, the Foundation was unaffected by the US collapse; in 2058 a report was leaked to several scientific journals that indicated a possible breakthrough was imminent. Shortly afterwards the Foundation used EuroSpace launch facilities to put an extensive lab module at the L5 Lagrange Point. In 2059, the L5 lab simply disappeared from all Earth and orbital sensors; a significant energy discharge was registered at the moment of disappearance, but no remnants or debris were ever located.

It was 2062 before the Foundation revealed to the World's press that two of its top researchers, Dr. Theodore Krensberg and Dr. Mai Tsukada, had been lost in the L5 disappearance while working on the final development of their Spatial Displacement System, the prototype for what is today known simply as the 'FTL drive' (although technical personnel continue to refer to it as Tsukada-Krensberg Drive, or TK Drive, in honour of its inventors).



In May 2063 it was announced that the Foundation's first functional trans-solar probe was ready for a test flight; twenty days later the probe returned from Barnard's Star with enough photographs and sensor data to convince even the most sceptical scientists that Einstein's theories had been, if not broken, then at least cleverly circumvented.

The loss of three out of five of the following probe missions due to unexplained causes delayed sending of a manned mission until 2067. In that year, on the 8th of July – almost 98 years since Man's first footsteps on the Moon – Captain Yoshida Mifune and Dr. Gloria Vandenburg, on board the FTL Probe ship SHALOM, became the first human beings in recorded history to leave Mankind's nursery and reach out for the stars.

Condensed from 'Breakaway – Man's Road to the Stars' by Thomas Yokuna-Falken, published by New Anglian EPress, Down, Albion, 22/10/2152.

HUMAN HISTORY 1992 to 2183

- 1992** Creation of the Commonwealth of Independent States from the Soviet Union.
- 2014** Britain withdraws from the EC following the Spanish invasion of Gibraltar and EC refusal to take economic or military action.
- 2018** Nicholas III crowned Czar in St. Petersburg as the Romanovs return to Russia.
Australian/New Zealand forces liberate French occupied New Caledonia. The EC threaten military retaliation. Both Britain and the USA offer military support to their antipodean relatives. The EC backs off.
- 2023** Creation of the EC sponsored Economic Union of African Republics (EUAR) in Central and Southern Africa. Arab African Countries remain outside of the Union.
- 2027** Destruction of the State of Israel by Islamic terrorist action.
Saudi Arabia annexes the Gulf States and launches an invasion of Yemen and Iraq.
Egypt declares solidarity with the Saudis and attacks Libya.
- 2032** The Gilderstein Foundation purchases an island off the Philippines, and with technical/financial support from Japan embarks on its research programme into FTL travel.
- 2037** Sikh fundamentalists detonate a small nuclear device in Delhi razing most of the city. The Indian Government retaliates by destroying Amritsar and massacring the entire population.
- 2039** Indonesia invades and conquers Malaysia.
- 2042** The EUAR follows the example of the EC and becomes a Federal super-state – The Pan-African Union (PAU).
- 2043** The House of Saud completes its suppression of its fellow Arab States and creates the Islamic Federation.
Borneo over-run by Indonesian forces.
- 2045** Heavy fighting on the Sino-Siberian border as the Beijing Government presses long redundant border claims against a financially and politically bankrupt Russia.
- 2046** South Korea falls to a lightning strike by North Korea and China.
- 2047** A Beijing sponsored coup in Moscow results in the return of Communist government to Russia and several of the Commonwealth Republics. The Czar and a sizable military force flee to the Ukraine, who along with Byelorussia and the Baltic States remain free of the Communist shackle, as the EC intimates to Beijing that further Communist expansion West will not be tolerated, whatever the cost. The Communist states then create the Eurasian Union. The remaining Commonwealth States create the Romanov Hegemony, realising that divided they will be picked off by the Eurasian Union in time.
- 2049** The US economy collapses, followed by the Federal Government as the President is assassinated in the bombing of the White House. General Parham declares the creation of a military government. Many states ignore the military proclamation, violently opposing the armed forces attempts to assume control.
- 2050** Parham requests UN military involvement to restore order in the US. The request is denied. The military government turns towards Britain and Canada for help. The 'Pacification' of the former USA begins.
The US inspired Organisation of American States collapses and is replaced by the Brazilian/Argentinian dominated League of Latin American Republics. The LLAR intimates that it will use force to recover territories occupied by 'Colonial Powers'. Britain advises the LLAR that it will use any weapon in its arsenal to protect its subjects in the Falkland Islands. The LLAR backs down.
- Philippines conquered by Indonesia and assimilated into the new Indonesian Commonwealth: Japanese naval units act to protect the Gilderstein Foundation's installation from Indonesian aggression.
- In response to the growing Indonesian threat Australia, New Zealand, Papua New Guinea and a number of South Sea Island States create the Oceanic Union.
- 2051** The Eurasian Union crosses the Himalayas and invades the Indian sub-continent.
- 2053** The Indonesian Commonwealth invades and conquers Burma and Thailand.
- 2054** The remainder of Indo-China falls to the forces of the Indonesian Commonwealth.
- 2057** Britain, Canada and the United States unite under the Crown and create the Anglian Confederation. Admiral Dewsbury appointed Lord Governor of the territory previously known as the United States of America.
The LLAR declares that the AC has no mandate to rule over the ex-Hispano-US peoples and decrees California, New Mexico and Texas as LLAR territory under foreign occupation and launches an invasion of these areas. The fifteen year War of the Americas starts.
- 2059** The Gilderstein Foundation's L5 Lab disappears from orbit.
- 2062** The Foundation reveals the true nature of the disappearance of the L5 Lab.
The Islamic Federation and PAU clash in North East Africa over water rights. The EC sponsor a peace initiative backed by a threat of force.
- 2063** The first trans-solar probe is launched to (and returns from) Barnard's Star.
- 2067** The Gilderstein Foundation sends the first manned FTL mission out of the Solar System.
- 2069** Both the Anglian Federation and the EC launch FTL craft and begin the colonisation of space.
- 2070** With help from the EC, the Islamic Federation, the PAU and the Romanov Hegemony all launch FTL craft.
- 2072** The LLAR sues for peace in the War of the Americas and cedes all territories in North and Central America to the Anglian Confederation. The LLAR looks to space as a means of expansion.
The Eurasian Union launches its first FTL ship and renames itself the Eurasian Solar Union.
- 2075** The LLAR launch their first FTL craft, as does the Indonesian Commonwealth.
- 2096** Founding of 'New Israel' on Garden world in the Epsilon Indi system.
- 2098** Conflict again between the Anglian Confederation and the LLAR as border clashes escalate into all out war. Within two years the LLAR loses all possessions on Earth. Survivors of the League government and its supporters flee to the small Brazilian colony on Santa Rico.
- 2099** First settlement of Albion by Anglian Confederation colonists.
- 2101** The EC splits as German and Eastern European States break away to create the New Swabian League in protest at continued attempts by the French to dominate the EC. The French create the Federal Stats Europa out of the remnants of the EC. War breaks out between the NSL and the FSE as claims and counter-claims come in over border areas. Three years of intermittent warfare ends with an Anglian Confederation sponsored peace plan.
- 2102** The Netherlands also leaves the FSE, but refuses NSL offers of Union and reasserts its independence.



- 2110** War breaks out between the Indonesian Commonwealth and the Oceanic Union in Papua New Guinea. Generally a low intensity war, it is notable for the widespread use of Grav vehicles as major combat weapons for the first time on Earth.
- 2112** The Sydney Accord ends the Papua New Guinea War.
- 2123** Islamic Federation and ESU forces clash on Earth as the ESU massacres many Muslims in an anti-Islamic pogrom in the Indian sub-continent. Diplomatic efforts result in an escalation to full scale war being averted.
- 2124** Expanding interests on the colony worlds and the difficulty of maintaining strong centralised control force some liberalisation within the ESU; Poland and Czechoslovakia petition to join the ESU as 'economic partners', considering themselves to have been poorly treated by the NSL.
- 2127** The balance of power within the ESU shifts away from Chinese domination as the Union Government is moved from Earth to the mainly Russian-settled Nova Moskva.
- 2128** LLAR mercenary forces hired by the Indonesian Commonwealth clash with Anglian forces on Earth against their employers will. The Indonesians execute the entire force in a move designed to conciliate the AC. The LLAR protests at the outrage and attacks the Indonesian Commonwealth. The Mercenary War, as it becomes known, lasts four years with both sides employing large contingents of mercenary and volunteer forces to complement their existing arsenal.
- The Islamic Federation and PAU clash over spheres of influence in space. The FSE enforces a peaceful solution.
- 2132** ESU and Anglian forces skirmish on Chi Draconis VII as both powers continue to expand their colonial settlement programmes. Over the next five years such 'border skirmishes' become more frequent, especially in the minor colonies and Outworlds.
- 2135** The Anglian Confederation moves its Parliament to Albion, which now has a population almost as large as England thanks to massive immigration and engineered population growth programmes. The reigning monarch, King Charles V, divides his time between palaces in England, Vermont, Ottawa and Albion.
- 2136** The Anglian Confederation renames itself the New Anglian Confederation and revises its Constitution to include all related colonies as independent members.
- 2137** The Eurasian Solar Union declares war against the New Anglian Confederation due to 'the hostile actions and intents of the imperialists'. Five years of intense warfare known as the First Solar War follows throughout the inner colonies and the Outworlds.
- 2142** Peace accord of Freisland ends the First Solar War.
- 2143** The United Nations Space Command (UNSC) is formed to forbid space conflict in the Core systems, and provide a peacekeeping force where required in the inner colonies. Pressure by several major powers results in UNSC having no mandate to operate in the Outworlds, except in a scientific research capacity.
- 2145** The Second Solar War breaks out between, on one side; the NAC, the NSL and Romanov Hegemony and on the other the ESU, the FSE and the PAU following an attack on Romanov Hegemony Outworld installations by the ESU. UNSC presence prevents the war intruding on the Core systems, though combat occurs on several inner colonies.
- 2157** The Treaty of Khorramshahr brings the Second Solar War to an end.
- 2159** California and Texas declare themselves independent from the NAC, and claim all rights to the colonies on Austin and Fenris (which they re-name New Pasadena). After much diplomatic protest and sabre-rattling, plus a few token military strikes, the NAC accepts the declaration and the FCT (Free Cal-Tex) is formed.
- 2163** Islamic fundamentalists seize power in New Riyadh, murdering the remaining members of the Saudi royal family. Loyalist elements attempt to regain power in a two year civil war but fail. The Islamic Federation becomes increasingly hostile towards both the NAC and the ESU.
- 2165** The Third Solar War breaks out as NAC forces launch a 'blitzkrieg' attack to regain worlds lost to the ESU following the Treaty of Khorramshahr. Initial successes falter as the FSE joins the ESU, providing men and materials as well as money to hire mercenary contingents from the Indonesian Commonwealth and the LLAR.
- 2166** The Third Solar War escalates further as the NSL attacks the bordering FSE frontier. Mercenary forces from New Israel are hired by the NAC. The Romanov Hegemony attacks the ESU and refuses safe passage for Indonesian or LLAR mercenary units through its space.
- 2173** The Sumani IV incident. ESU and NAC peace negotiators assassinated by an Islamic Federation terrorist attack. Years of distrust between the two powers lead to them blaming each other and a failure to identify the real culprit. The Third Solar War intensifies.
- 2176** Archaeologists discover the remains of a non-human civilisation on a rim world planet in Indonesian Space.
- 2183** The UNSC Survey Cruisers McCaffrey and Niven fail to return from an Outworld survey on the fringe of PAU space; a follow-up mission finds indistinguishable debris from the Niven, exhibiting obvious signs of battle, but no trace of either the McCaffrey or any hostiles...
- To be continued....

SITUATION UPDATE: 2183

The political situation in Human space as of 2183 is a highly unstable one; the major power-blocs of the ESU and NAC are locked in a decades-long war of attrition punctuated by sudden burst of renewed fighting, while many of the smaller Spatial and Earthbound powers are involved in minor wars, skirmishes and disputes of their own.

The UNSC has so far managed to carry out its primary function, that of preventing space warfare (and thus the risk of planetary bombardment) in the Core systems of Sol, Centaurus and Barnard's. It has, however, been largely ineffective in its secondary role as a peacekeeper in the multi-national inner colonies. The Outworlds – minor colonies and outposts, mainly claimed by single nations are suffering badly from the effects of the Third Solar War and the consequent disruption of the trade and commerce which is their lifeline.

The recent disappearance of the two UNSC survey ships has caused a storm of panic speculation among the media, with the sensationalist press screaming headlines of 'Aliens from Beyond the Rim'...

USING MINIATURES

Although the game will work perfectly well using counters or other markers to represent the starships, the visual aspect is greatly enhanced by using miniature ship models, either commercially produced or scratchbuilt.

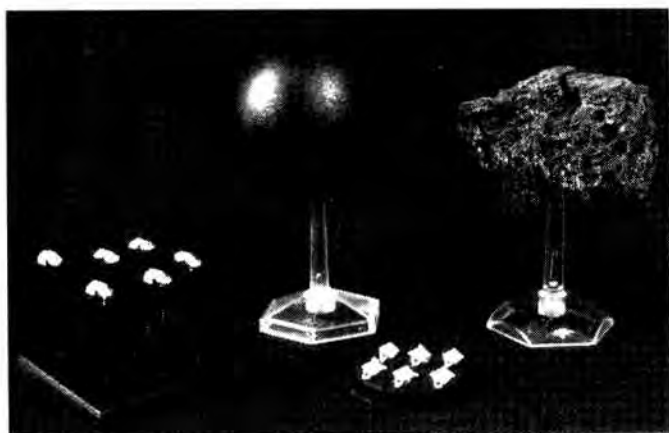
If you decide to use miniatures, they may be simply placed flat on the table or mounted on some kind of base or stand. Ships on stands certainly look better and the centre of the stand's base gives a useful reference point for measuring distances in play. Some manufacturers supply a plastic or wire stand with their ship models; for those that do not, you can either buy separate packs of clear plastic stands (available from most games shops or direct from us at GZG) or else produce your own stands from a square of perspex, wood or plastic and a short length of rigid wire.

If you are using Fighter Groups in the game, there are a number of ways these can be represented. To give maximum visual appeal you can mount the correct number of individual Fighter models on a single base so that they are removable in some way to indicate losses; they may either be stuck to the base with very small blobs of Blu-Tack, or can even be on short individual wire stands that are then 'plugged in' to holes drilled in the base.

A much simpler way of denoting Fighter Groups is to permanently mount a few Fighter models (or even a single one) on a base, then use either a numbered counter or a small D6 placed by the base to indicate the actual number of Fighters it represents.

Asteroids can be made from chunks of coarse foam-rubber or sponge, painted black and drybrushed with greys and browns. We at GZG are planning to release a range of resin cast Asteroids in the near future.

To indicate 'Bogeys' (unidentified sensor traces) when using the optional sensor rules, you can either use counters or, if you are going all-out for the miniatures side, spray some ping-pong balls matt black and mount them on stands. Put an I.D. letter on each base and you have your long-range scan contacts!



Two alternative methods of mounting Fighter Groups, a 'Bogey' marker (ping-pong ball) and an Asteroid (foam chunk).

STARSHIP MODEL AVAILABILITY

There is a large range of cast white-metal miniatures specifically designed to support FULL THRUST, produced as a co-venture between GZG and CMD – a full list and ordering details may be found on page 46.

CMD (COPELAND'S MODELS): The "official" FULL THRUST range from CMD (available by mail order from GZG, and also produced under license for the USA by Geo-Hex) is growing very fast, as will be seen from the current listings given later in these appendices. In addition to these, we at GROUND ZERO GAMES are also starting to produce some items ourselves in both resin and metal, to complement the CMD ranges. Write to GZG at the address on the back of this book for latest information (SSAE appreciated!).

However, as with the background information, we are not saying you have to use the 'official' ships; there are several other ranges available in widely differing styles and prices. Looking at the other ranges available at the time of writing, the following manufacturers produce suitable ship models in white metal:

SKYTREX LTD., 28 Brook Street, Wymeswold, Loughborough, Leicestershire have a good sized range of models in their STARGUARD series, organised into three different 'fleets' of six ship classes each – design style varies widely between the fleets. Write to Skytrex for their latest listings, or see the ships on their trade stand at most large wargame shows.

IRREGULAR MINIATURES, 69A Acomb Road, Holgate, York YO2 4EP have a range of ships, with both 'Human' and 'Alien' designs, including some new fighter types. These models, although rather basic in design and lacking in detail, are VERY low priced and well worth a look if you want a large fleet on a very small budget.

RAFM have just released the first of the official "Traveller – The New Era" starships under license from GDW. I have just received samples of these from the UK importers, **ROBINSON IMPORTS**, and must say they look good. Although a much larger scale than the CMD range (my guess is that they scale out at something like 1/600-1/700), there are some that would fit in very well with the other ship lines – especially as merchants and other ancillary vessels. Check these out at your local games shop.

Aside from the ranges of models actually designed to represent large starships, there are a few ranges of larger-scale 'Space Fighter' models that may be useful for certain ship classes; in particular the 'SILENT DEATH™' miniatures produced by I.C.E.™ (for their excellent miniatures/boardgame of the same name) are well worth a look, as the range contains a number of designs that serve well for Escorts and Cruisers – their intended scale (about 1/700 I believe) is not clearly apparent and they will pass for much bigger ships in a smaller scale.

Referring to the photograph of 'old' ship models on page 45, you may be lucky enough to find a few of the ranges mentioned around on the second-hand market, especially at the Bring-and-Buy stalls of wargames shows; in particular the QT MODELS, VALIANT and SUPERIOR ranges are well worth trying to track down.



There are also endless opportunities for scratchbuilding and converting models: certain 'jetpacks' from 25mm SF figures can actually make very convincing small ships (this may sound strange, but just look at some of the backpack designs next time you go into your local games shop), and I have seen an excellent little vessel made from a 25mm scale SF hand weapon with a 10mm diameter metal shield (with domed boss) stuck on top of it as a 'Bridge'!

Craft shops and stalls are great sources of plastic and wooden beads, spheres and so on. With a little ingenuity, a few pence and a tube of glue, the possibilities are endless!

Starship models through the ages!

- 1: Solar Force Dreadnought from QT Models.
- 2,3,4: Starfleet Wars ships from Superior Models.
- 5,6: Minifigs Cruiser and Destroyer from mid 1970s.
- 7: Garrison Startroopers Cruiser, late 1970s.
- 8: Valiant Miniatures Destroyer, produced in the UK by Hinchliffe under licence.
- 9: Leicester Micro Models ship (late 1970s?).
- 10: Fighter or Scout from Superior Models.
- 11: The one that started it all: Darian Command Ship in resin from Skytrex Ltd., circa 1973.

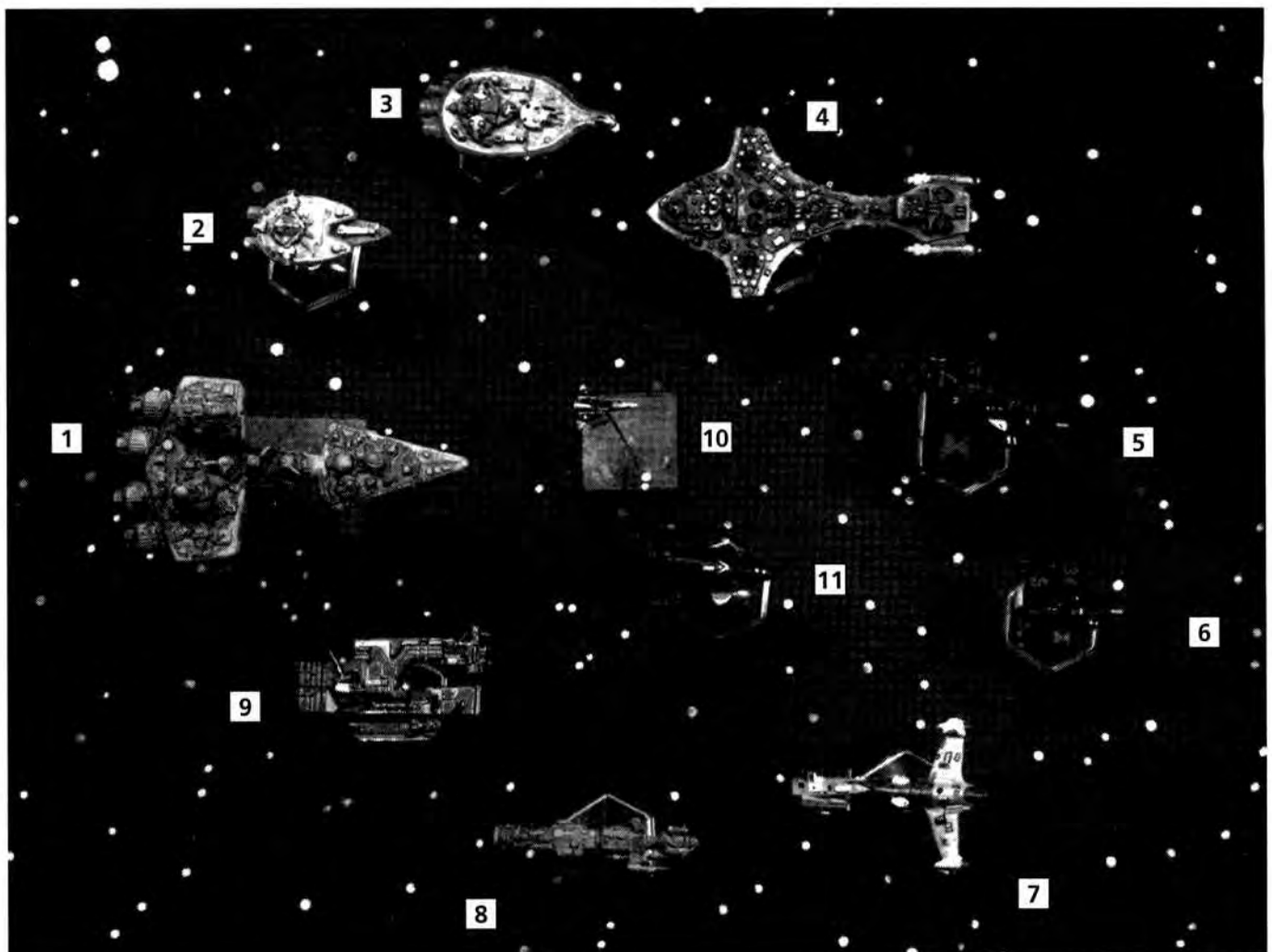
THE COUNTERS AND TEMPLATES:

On page 47 you will find a set of counters that represent the ships used in the Introductory Scenario, plus sets of 'Bogey' and 'Mine' counters that can be used with the relevant sections of the Advanced rules. Also on that page is a full-size template for the COURSE AND FIRE ARC GAUGE (refer to rules on pages 5-6), complete with natty little handle to hold it by! (Are we good to you, or what?).

There is also a set of three concentric ring templates for the Nova Cannon to be found on page 20, if you wish to use this VERY optional weapon system!

To use the counters and templates, get the relevant pages photocopied (several times if you want lots of Bogey markers), stick the copies to some suitably-thick card or mounting board, then carefully cut them all out. DON'T just cut them out of the book, because your Ship Record Sheet master is on the other side!

The ship counters in particular can look very effective if the white ship outlines are then coloured in, perhaps with one of the fluorescent highlighter pens. All the ship counters and the Bogey markers have clearly defined 'centre' dots, from which all measurements should be taken while in play.



The "FULL THRUST" STARSHIP RANGE:

This range is cast in whitemetal by CM Designs, using the FULL THRUST name under licence from GZG. In the UK and Europe, the ships are available by mail order exclusively from us at GZG.

UK and overseas customers (excluding North and South America) should contact GZG at the address on the back cover of this book, to place orders or request updates on range availability; kindly enclose a stamped SAE with all enquiries, or three International Reply Coupons (IRCs) for overseas enquiries. A full illustrated catalogue of all our ranges of SF gaming models, figures and rules in 25mm, 15mm, 1/300 and 1/2400 scales is available for £1.00 (UK) or 5 x IRCS.

UK Post and Packing on models is 10% of order value.

For **USA, Canadian and S.American customers**, the FULL THRUST Starship Miniatures range is currently being produced under license by CAPRICORN SPACE (a division of GEO-HEX), 2126 North Lewis, Portland, Oregon 97227, USA, for distribution to the Hobby trade throughout North and South America. Please contact Capricorn Space/Geo-Hex for current prices and availability of the range, or ask your local Hobby Store to contact them for dealer information.

The NEW ANGLIAN CONFEDERATION (NAC):

FT 101A Firestorm II class FIGHTERS (pack of 12)	£0.95
FT 102A Harrison class SCOUTSHIPS (pack of 4)	£0.95
FT 103 Arapaho class CORVETTES (pack of 3)	£1.45
FT 104 Miyazaki class FRIGATES (pack of 2)	£1.65
FT 105 Ticonderoga class DESTROYERS (pack of 2)	£1.95
FT 106 Hoshino class LIGHT CRUISER	£1.45
FT 107 Furious class ESCORT CRUISER	£1.95
FT 108 Vandenburg class HEAVY CRUISER	£2.45
FT 109 Majestic class BATTLECRUISER	£3.95
FT 110 Victoria class BATTLESHIP	£4.45
FT 111 Avalon class BATTLEDREADNOUGHT (Heavy Battleship)	£4.95
FT 112 Valley Forge class SUPERDREADNOUGHT	£7.95
FT 113 Inflexible class LIGHT FLEET CARRIER	£6.45
FT 114 Ark Royal class FLEET SUPERCARRIER	£7.95

The EURASIAN SOLAR UNION (ESU):

FT 201B Katya class FIGHTERS (pack of 12) (new design)	£0.95
FT 202A Lenov class SCOUTSHIPS (pack of 4)	£0.95
FT 203 Nanuchka class CORVETTES (pack of 3)	£1.45
FT 204 Novgorod class FRIGATES (pack of 2)	£1.65
FT 205 Warsaw class DESTROYERS (pack of 2)	£1.95
FT 206 Tibet class LIGHT CRUISER	£1.45
FT 207A Beijing/B class ESCORT CRUISER	£1.95
FT 208 Gorshkov class HEAVY CRUISER	£2.45
FT 209 Manchuria class BATTLECRUISER	£3.95
FT 210 Petrograd class BATTLESHIP	£4.45
FT 211 Rostov class BATTLEDREADNOUGHT (Heavy Battleship)	£4.95
FT 212 Komarov class SUPERDREADNOUGHT	£7.95
FT 213 Konstantin class ATTACK CARRIER	£7.95
FT 214 Tsiolkovsky class LIGHT CARRIER	£6.45

The KRA'VAK (Alien forces):

FT 401 Ra'San class FIGHTERS (pack of 12)	£0.95
FT 402 Lu'Dak class INTRUDERS (SCOUTSHIPS) (pack of 4)	£0.95
FT 403 Ka'Tak class STRIKERS (CORVETTES) (pack of 3)	£1.45
FT 404 Da'Kak class FRIGATES (pack of 2)	£1.65
FT 405 Di'Tok class DESTROYERS (pack of 2)	£1.95
FT 406 Vo'Bok class HUNTER (LIGHT CRUISER)	£1.45
FT 407 Si'Tek class PATROL CRUISER	£1.95
FT 408 Va'Dok class HEAVY CRUISER	£2.45
FT 409 Ti'Dak class BATTLECRUISER	£3.95
FT 410 Ko'Vol class BATTLESHIP	£4.45
FT 411 Lo'Vok class BATTLEDREADNOUGHT (Heavy Battleship)	£4.95
FT 412 Yu'Kas class SUPERDREADNOUGHT	£7.95
FT 413 Ko'San class STRIKE CARRIER	£7.95

The NEU SWABIAN LEAGUE (NSL):

FT 501 Adler class FIGHTERS (pack of 12)	£0.95
FT 502 Falke class SCOUTSHIPS (pack of 4)	£0.95
FT 503 Stroschen class CORVETTES (pack of 3)	£1.45
FT 504 Ehrenhold class FRIGATES (pack of 2)	£1.65
FT 505 Waldburg class DESTROYERS (pack of 2)	£1.95
FT 506 Kronprinz Wilhelm class LIGHT CRUISER	£1.45
FT 507 Radetzky class ESCORT CRUISER	£1.95
FT 508 Markgraf class HEAVY CRUISER	£2.45
FT 509 Maximilian class BATTLECRUISER	£3.95
FT 510 Maria Von Burgund class BATTLESHIP	£4.45
FT 511 Szent Istvan class BATTLEDREADNOUGHT (Heavy Battleship)	£4.95
FT 512 Von Tegetthoff class SUPERDREADNOUGHT	£7.95
FT 513 Der Thuerdank class CARRIER	£7.95

MERCHANT, SUPPORT and CIVILIAN SHIPS:

FT 301 Exxon jupiter class BULK TANKER (resin & metal kit)	£5.95
FT 302 Clarke class EXPLORATION/SURVEY CRUISER	£4.95
FT 303 Starbase - kit of modular resin & metal sections	£6.95
FT 303A Starbase extension section (resin, to fit FT 303)	£1.95
FT 304 System Defence Installation (based on FT 303 design, resin & metal)	£4.95
FT 305 Hamburg class Heavy Modular Freighter	£3.95
FT 305A Freighter extension section & extra cargo pods for FT 305	£2.95
FT 306 Bustler class Deep Space Tug	£2.45
FT 307 Antares class Inner-System Shuttle (interface capable)	£1.65
FT 308 Medium Freighter	£2.95
FT 309 Medium Freighter (alternative to 308)	£2.95*

The FEDERAL STATS EUROPA (FSE):

FT 601 Mirage IX class FIGHTERS (pack of 12)	£0.95*
FT 602 Mistral class SCOUTSHIPS (pack of 4)	£0.95
FT 603 Athena class CORVETTES (pack of 3)	£1.45
FT 604 Ibiza class FRIGATES (pack of 2)	£1.65*
FT 605 San Miguel class DESTROYERS (pack of 2)	£1.95
FT 606 Suffren class LIGHT CRUISER	£1.45
FT 607 Milan class ESCORT CRUISER	£1.95
FT 608 Jerez class HEAVY CRUISER	£2.45*
FT 609 Ypres class BATTLECRUISER	£3.95*
FT 610 Roma class BATTLESHIP	£4.45*
FT 611 Bonaparte class BATTLEDREADNOUGHT (Heavy Battleship)	£4.95*
FT 612 Foch class SUPERDREADNOUGHT	£7.95*
FT 613 Bologna class LIGHT CARRIER	£6.45*
FT 614 Jeanne D'Arc class FLEET CARRIER	£7.95*

GZG FULL THRUST ITEMS:

GZ 001 Star Truck Light Space Freighter	£1.45
GZ 002 Asteroid Base Installation (Resin)	£4.95
FT STD Clear Plastic Starship Stand	£0.10

* Indicates model not yet in production at time of publication - please check with us for current availability lists before ordering.

MORE THRUST

The first SUPPLEMENT BOOK for FULL THRUST is now available, containing many new and optional rules and expansions, background, timeline extension, scenarios,

PLUS: Interface between **FULL THRUST** and **DIRTSIDE II** (and other Ground Combat rules),

allowing you to stage planetary assaults!

Details on the alien KRA'VAK, with full ship stats, plus ANOTHER completely new alien race - the SA'VASKU!

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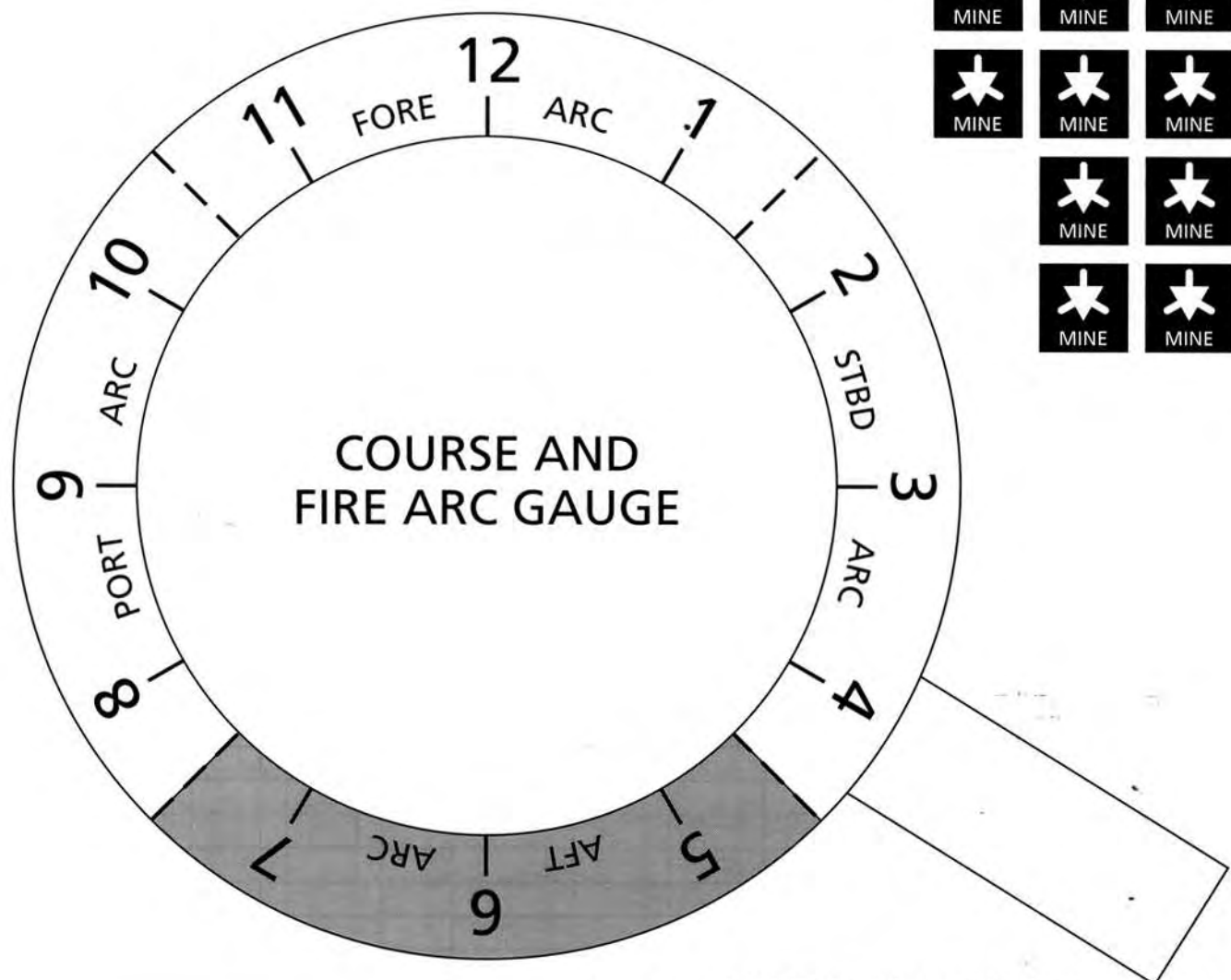
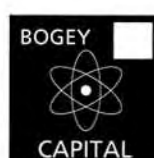
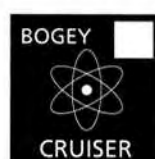
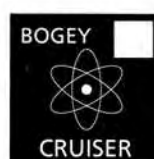
BOGEY AND MINE MARKERS



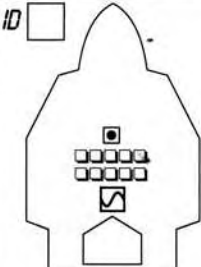
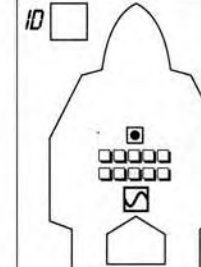
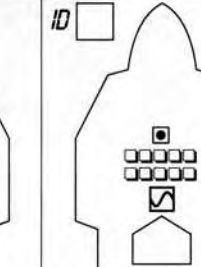
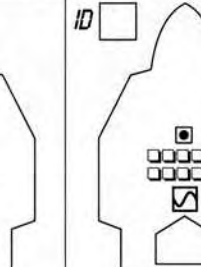
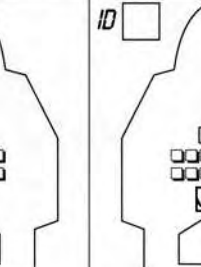
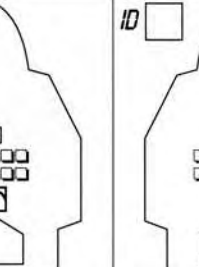
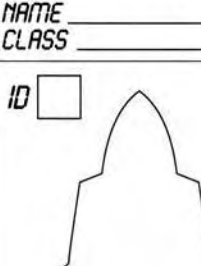
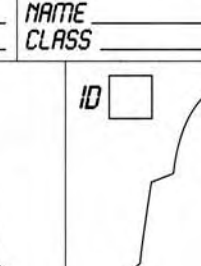
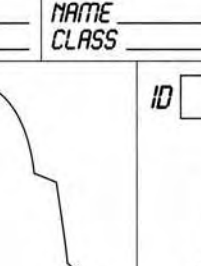
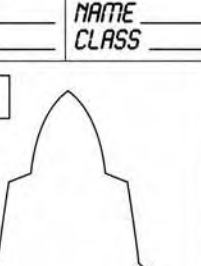
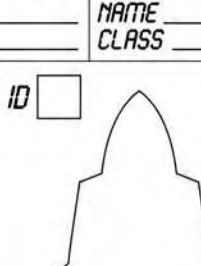
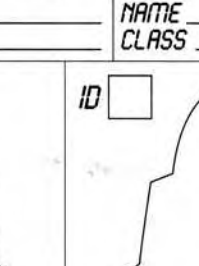
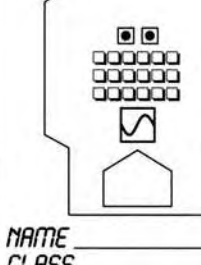
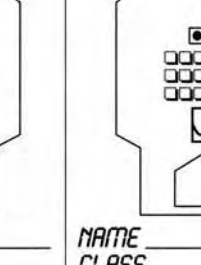
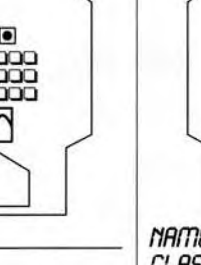
EURASIAN FORCES



NEW ANGLIAN FORCES



SHIP RECORD SHEET

 NAME _____ CLASS _____	 NAME _____ CLASS _____	 NAME _____ CLASS _____	 NAME _____ CLASS _____	 NAME _____ CLASS _____	 NAME _____ CLASS _____
 NAME _____ CLASS _____	 NAME _____ CLASS _____	 NAME _____ CLASS _____	 NAME _____ CLASS _____	 NAME _____ CLASS _____	 NAME _____ CLASS _____
 NAME _____ CLASS _____	 NAME _____ CLASS _____	 NAME _____ CLASS _____			

FLEET MOVEMENT CHART

FLEET:

ADMIRAL:

[illegible]

... SENSOR CONTACT CONFIRMED ... IFF NEGATIVE ... PREPARE TO ENGAGE ...



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