Test - New Point Defence

21 March 2015

1.1 Introduction

These new rules are intended to solve the non-linear scaling problem of fighters in FULL THRUST. Too many fighters become an all-devouring swarm, but there is also a problem at the opposite end where too few fighters splatter like bugs on a windscreen. Neither matches the behaviour of fighters in most science fiction from which CROSS DIMENSIONS draws inspiration.

The intent is not to 'nerf' fighters or prevent fleets with large numbers of fighters from winning. The aim is to make fighter combat less predictable, without battles being decided by fleet composition before a shot is fired; to encourage other tactical options for use of fighters; and to slow the tempo of fighter combat somewhat.

There are no new systems, but the procedure is completely different, being applied to the entire combat around a ship rather than individual groups. The defender rolls a few more dice in fighter attacks, but point defence allocation is simplified so overall play should be no slower or even faster.

While these rules should still give interesting and balanced games for a wider variety of fleets, they are almost certainly not unbreakable. Please break them, and let me know how you did it.

All feedback welcome: email laranzu@ozemail.com.au.

These rules are written for FULL THRUST:CROSS DIMENSIONS but can be used with the '2.5' Fleet Book rules or the new Full Thrust: Continuum.

Core concepts

Point defence forms a barrier against incoming missile and fighter attacks. Performance of these systems is more unpredictable than beams or projectiles. Missiles are affected by target profiles, flight profiles, counter-measures, countercounter-measures, and so on; while fighters add the individual human (or sapient) element. A ship's point defence is therefore recalculated each turn it is under attack, with dice representing the various factors.

Large numbers of fighters are assumed to attack in dispersed waves so can be engaged separately; attacking in one large wave to saturate the point defence would result in the same or higher casualties from being easier targets and less effective attacks due to mutual interference. Fighters or at least their pilots, are valuable and strong point defence is more likely to force the fighters to attack from outside effective range or deter them altogether rather than inflict additional casualties.

Both salvo and heavy missiles are assumed to sometimes miss undefended targets due to malfunctions. Missiles don't care about casualties, but the blast effects can unintentionally interfere with or destroy other missiles aimed at the same target. Such fratricide is especially likely for large numbers of salvo missiles, which become progressively less effective.

1.2 Sequence

Missile launch, fighter movement, ship movement, and fighter secondary move rules don't change.

The first phase of missile and fighter combat is target allocation, which doesn't change. Missiles home in on the nearest enemy target; fighters may choose to make an attack run on any enemy ship within range and arc. Screening fighters must either be engaged by the attacker, choose to engage fighter groups themselves, or contribute to the ship point defence.

Next phase is area defence allocation. Once targets are known, ships with ADFC must decide which other ships they will protect, and how many PDS they will allocate to other ship(s) or retain for their own defence. This is done before any missile or fighter attacks are resolved. Again, this is the same as before except that PDS are allocated by ship, not by individual salvo or group.

Resolve missile and fighter actions ship by ship, in any order the players find convenient. You could perform each step across the entire table if you prefer, but that will require more record keeping. Ship by ship is easier.

The **attacker** is the player who controls the missiles or fighters in a particular action, the **defender** is the player whose ship is under attack. The roles will change from ship to ship during the turn.

Although each ship action is divided into steps, all combat effects are considered simultaneous. Damage and casualties take effect at the end of the action, before ship to ship fire.

Each attack has these steps:

- The defender rolls for each PDS, B1, or scattergun to generate the ship point defence level for this turn. If the ship has unengaged screening fighters, the player may instead choose to roll for each fighter. A ship may be defended by point defence systems or by screening fighters, not both in the same turn.
- The attacker decides which groups, if any, will provide assistance by suppressing defences instead of attacking directly.
- The attacker rolls to hit for salvo or heavy missiles and/or plasma bolts; then damage from missile or plasma bolt hits.
- The attacker rolls to hit and inflicts damage for all fighter groups.
- The defender rolls for point defence casualties inflicted on the fighters.
- Lastly, ships make any threshold checks required by damage received and fighter groups remove casualties.

Point defence level

The defender rolls 1D6 per B1 or PDS allocated to the ship, or 4D6 per scattergun, as if the target were regular fighters. (B1: 5=1 hit; 6=1 hit and re-roll. PDS or scattergun 4, 5=1 hit; 6=2 hits and re-roll.) The type of incoming missile or fighter makes no difference, but will be taken into account when determining hits or casualties. As

before an ADFC cannot be used to allocate B1 in defence of another ship. Scatterguns cannot be mixed with B1 or PDS.

Each screening interceptor rolls as if a PDS, each standard, heavy, long-range, or fast fighter rolls as if a B1. Attack or torpedo fighters cannot screen. Fighters are considered to be less effective in a passive defensive role than when aggressively dogfighting.

The number of 'hits' generated is the ship's **point defence level** or PDL for this turn. It will apply to all incoming missile or fighter attacks for the turn, regardless of numbers of attackers or damage received.

The point defence level determines the *band* in which the attacking fighters or missiles roll to hit. Like screens against ship weapons, band levels increase the difficulty to hit. Unlike screens, the band level does not correspond 1:1 with the point defence level and higher bands require more PDS hits than lower.

Active screens increase the point defence level against fighters but not missiles, and the number of salvos decreases the point defence level. It is therefore possible that some attacks will roll in a different band than others.

1.3 Heavy missiles and plasma bolts

Each heavy missile or plasma bolt must make a successful hit roll depending on the Point Defence Level band as given below.

PD Level	Score to hit
0	2+
1	3+
2-3	4+
4-6	5+
7-10	6
11-15	6, -1 die damage
16+	6, -2 die damage

Against 11+ PDL heavy missiles can still hit but have their damage reduced. Class-1 plasma bolts have no effect against 11+ PDL, class-2 none against 16+.

Example: A cruiser with 2 B1 and 2 PDS is attacked by 3 heavy missiles. The cruiser rolls 1,4 for the B1 = zero and 4,6, re-roll 2 for the PDS = 3 for a total point defence level of 3. Consulting the table, at the 2-3 band the heavy missiles need 4 or better to hit, and will do full damage.

Screens do not alter the point defence level against missiles or plasma bolts, but can reduce the damage inflicted.

If you want to add super stealthy, super protected, or otherwise advanced heavy missiles to your game, they roll one band lower.

1.4 Fighter attacks

Each fighter rolls to hit depending on the band as given below:

PD Level	Score to hit
0	3, 4 = 1; 5 = 2; 6 = 2 + re-roll
1	4, 5 = 1; 6 = 2 + re-roll
2-3	5 = 1; $6 = 2 + re-roll$
4-6	5 = 1; $6 = 1 + re-roll$
7-10	6 = 1 + re-roll
11-15	6 = 1
16+	no effect

A level-1 advanced screens adds +2 to the point defence level, level-2 advanced screen +4. Standard screens add +2 or +4 against all fighters except Torpedo or Kinetic.

Attack and Torpedo fighters roll one band lower, unless that would reduce the band to zero. For each group providing assistance (below) roll one band lower, unless that would reduce the band to zero. (In other words, some defence is always better than none.)

Torpedo fighters inflict 1D6 damage per hit, which may be reduced by advanced screens. Rerolls for other fighters ignore the point defence level but are non-penetrating so are still affected by screens and armour.

All fighters expend 1 CEF, even if the result was 'no effect'.

Example: A dreadnought with 2 B1, 3 PDS, and a level-1 screen is attacked by 4 full strength groups of standard fighters.

The B1s roll 4,4 and the PDS roll 2,4,6,2 for total point defence level = 3. Against standard fighters the screen is effective, so the PDL increases to 5, one band higher. Each fighter therefore needs to roll a 5 or 6 to score 1 hit. Any re-rolls will be made against the level-1 screen only (PDL 2). The first group rolls 1,2,3,3,6,6=2+2,2=0; the second 1,2,3,5,6,6=3+1,5=1; the third 3,3,5,5,5,6=4+6=2+5=1; the fourth 1,2,3,4,3,6=1+5=1. The fighters have inflicted 15 damage points.

Fighter assistance

Some of the fighters making attack runs against a ship may choose instead to provide *assistance*, supressing or distracting point defence systems to increase the chance of other fighters delivering a successful attack. Any fighter group other than interceptors can assist one other fighter group per turn.

Assisting groups do not roll attack dice themselves, instead they lower the hit rolls for the group being assisted by one band. Two fighter groups could choose to make two normal group attacks, or one group could attack at one band lower from being assisted by the other. Six fighter groups could have three groups each assisted by one other attacking at one band lower, or two groups each assisted by two others and attacking at two bands lower.

The number of dice rolled by the attacking group is equal to the smallest of the groups attacking or assisting.

Assisting fighters still expend a CEF and still take casualties from point defence.

Example: A heavily escorted dreadnought is attacked by two full strength squadrons of attack fighters and two somewhat battered squadrons of heavy fighters with 3 and 4 surviving members. The dreadnought and escorts roll well on their point defence for a final level of 17. As this would make the dreadnought invulnerable to the heavy fighters for this turn, the attacker decides that a squadron of heavy fighters will assist each attack squadron.

The attack fighters automatically roll one band lower (11-15) and then one more band for being assisted, down to 7-10. However one squadron is assisted by a group of 3, so only rolls 3 dice to hit instead of 6; and the other only rolls 4 dice.

1.5 Fighter casualties

If the Point Defence Level before adding any screens was greater than zero, the defender rolls 1D6 per attacking fighter group, whether providing assistance or attacking directly, for casualties. Divide the attacking groups by type and roll the number of dice for each type simultaneously, with the attacker distributing casualties among groups of the same type as desired.

Ships with ADFC or scatterguns inflict more casualties; but the ADFC bonus only applies if the ship itself has the ADFC system, not just for being defended by another ship with ADFC.

Against heavy fighters, ADFC or scatterguns are 5 = 1; 6 = 2 + re-roll. Others are at 5 = 1; 6 = 1 + re-roll.

Against other fighters, ADFC or scatterguns are $4,5=1;\ 6=2+re$ -roll. Others are at $5=1;\ 6=2+re$ -roll.

Example: The dreadnought in the previous example was attacked by 4 fighter groups, two attack and two heavy. The PDL was not zero, so the attackers can take casualties. The defender rolls 2D6 against the attack fighters scoring 4,6 + 3 = 2 casualties and and 2D6 against the heavy fighters scoring 4,5 = 1 casualty. The attacker can allocate 1 attack casualty per attack group or 2 against one attack group and none on the other; and 1 heavy casualty on either group; but cannot allocate attack casualties to heavy groups or vice versa.

1.6 Salvo missiles

The band for salvo missiles depends on the number of salvos as well as the point defence level. Each additional salvo after the first reduces the ship point defence level (not band) by one, or in other words the PDL for salvo missiles is original PDL - number salvos + 1.

Using the adjusted PDL, roll one die for each salvo with the following modifiers to determine how many missiles actually hit.

PDL - salvos	Number of missile hits
0	D6
1	D6 - 1
2-3	D6 - 2
4-6	D6 - 3
7-10	D6 - 4
11-15	D6 - 5
16+	none

Negative results count as no missile hits.

Screens do not alter the point defence level against salvo missiles. Advanced screens reduce the damage inflicted.

Example: A superdreadnought and escorts is under attack by four fighter groups and six missile salvos. The combined point defence level is 9. The fighters will have to attack at band 7 - 10; but because there are six missile salvos the point defence level becomes 9 - 6 + 1 = 4. The attacker rolls one D6 per salvo, scoring 1, 3, 4, 5, 5, 6. At the 4 - 6 band subtract 3 from each die, so ignoring results of zero or less, 1 + 2 + 2 + 3 = 8 missiles hit the superdreadnought, each doing D6 damage.

1.7 Suggested points cost changes

An ADFC has mass 2.5% of the ship, minimum 2. This assumes that the area defence role has a significant impact on many or all aspects of ship design, and also on crew training and operational procedures. Note that any existing escort or cruiser designs with ADFC doesn't change, only capitals are affected.

Attack fighters increase to 5 points each?