**Hexes & Highguard**

adapted from a magzine article by Jefferson P. Swycaffer

The combat system presented in TRAVELLER Book 5, High Guard, is naturalistic, if abstract, and carries a good battle feel.

Nevertheless, the mechanics of lining up the two fleets against one another for a slugfest is reminiscent of a pistol duel, or the infamous game of Irish Knockdown.

The following is an High Guard hex system that translates the battle to a hex-grid for a more visual depiction. Needed is a hex-sheet of at least 40 × 40 hexes across, or larger for more massive fleet actions. Also needed will be counters or markers for each ship or squadron of fighters. A marker for the planet that usually serves as the object of contention is also useful. As in High Guard, the word ship can mean an individual ship or a squadron of fighters. The optional rules in the JTAS issue #14 are also highly recommended.

**Scale:** Each hex is 25,000 kilometers = 6.4 times the planet’s size code in its UPP. Safe jump distance from a size 8 world, for instance, is 51 hexes.

**Time:** As in High Guard, each turn is 20 minutes long.

**Range:** All ranges are counted in hexes. From zero to two hexes is equivalent to High Guard’s short range, while from three to four hexes is equivalent to long range.

**1. Sequence of play**

Play proceeds as in High Guard, with the following differences. The Initiative Step is performed only once every two turns, on odd-numbered turns. The player who gains the initiative has it for that turn and the following one. All movement of ships takes place during the Range Determination Step. On the first, or odd-numbered, turn, the player with the initiative chooses whether he wishes to move, in which case he moves his ships immediately, or whether he wishes to move in the second or even-numbered turn. The player without the initiative moves in whichever turn the other player does not. Further, the player with the initiative may add one to all of his ships that are using tactical movement that turn (see below). All fire is simultaneous, as in High Guard, although it is first executed by the player with the Initiative. The Battle Formation Step has new limits on which ships may be considered in the Reserve. In the Pre-Combat Decision Step, breaking off by acceleration is a function of running away from the enemy, using the movement rules. Also, contrary to the High Guard rules, pursued and pursuing ships may return

**2. Movement**

There are two kinds of movement in this system: tactical and running. Each turn, every ship using tactical movement may move in any direction or combination of directions for a distance in hexes less than or equal to its tactical movement allowance.

This allowance is derived as follows: First, find the pilot’s contribution to the manoeuvrability of the ship, which is equal to the Pilot-skill rating of the ship’s pilot, minus one, and then divided by - two, rounded down to the nearest - whole number. To this number, add the ship’s maneuver rating in Gs, and its Agility rating, also in Gs. Divide the sum by three, and round up or down to the nearest whole number. Thus a ship with maneuver drive 6, Agility 4, and Pilot-4 would be able to maneuver up to four hexes each turn using Tactical movement [(4-1)/2] = 1; (6 + 4 + l)/3 = 3.67, which rounds to 4. Emergency Agility may be used to increase this number, as in High Guard. Running movement requires a bit of record keeping. Running movement is used to escape combat by outrunning the enemy, or for moving rapidly across the battle space to arrive at a critical across to arrive at a critical sector.

In the first turn of running movement, the ship moves in roughly a straight line, a number of hexes equal to or less than its Agility rating (Emergency Agility may be used).   
  
In the second and subsequent turns of running movement, the decision must be made whether to continue to accelerate or to decelerate.

If the ship continues to accelerate, then in the second turn of running, it moves a number of hexes equal to the number of hexes it moved in its first turn of running, plus up to its Agility rating more in hexes. Thus, the fastest a ship may be moving in its second turn of running is twice its Agility rating in hexes.

The ship must end this move as far away as possible (by hex count) from the point at which it began its run. In the third turn, its speed may again be incremented by up to its Agility rating, subject to the same restriction. A running ship thus has roughly sixty degrees of overall turning ability.

A running ship decelerates by the same technique, decreasing its running speed by a number of hexes equal to or less than its Agility rating each turn, always maximizing the distance from the spot, however many turns ago, where it started its run. This distance may never be less than what it could maximally be, so a running ship may not return along its path in one run. When its running speed has decreased to zero or to one, the run is over; tactical movement may be resumed or another run may be begun.

Launching and recovery: A ship may launch its carried squadrons or ships normally during a turn. The released ships end their turn in the same hex as the launching ship. If the launching ship was on a run, the launched ships share the launching ship's run speed and run starting hex, but are free from that point to continue the run or to decelerate as if on their own individual run.

Recovery is more straightforward. For carried ships to be recovered, they must begin and end the turn in the same hex as the recovering ship. Ships on runs may recover and be recovered normally by this procedure.

The line of battle and reserve:

These distinctions become slightly more naturalistic. For a ship to be considered in the reserve, it must have a ship covering it. One ship covers another by being in the same hex at the time of the Battle Formation Step, and staying with that ship during the rest of the turn. The rules from this point are the same as in High Guard; for the ships that are in covered reserve to be fired upon, the covering ship must first be broken through. Any number of ships may cover any number of ships in that particular reserve. (Notice that if the entire fleet stays in one hex, the game devolves into standard High Guard combat.)

**3. Combat**

Combat is as per normal High Guard rules. A ship within range of an enemy may fire, offensively and defensively, without restriction upon that enemy. Notice that although only one player moves during each turn, both sides may fire freely. Also note that a ship might be within short range of one enemy, and long range of another. There is no reason not to fire beams at the nearer one and missiles at the other, to maximize the efficiency of fire.

**Planets:** A planet is too small in this system to have any significant gravitational effect, or even positional effect. It serves only as a marker and as the center of the radius from which a jump is unsafe.

**Suns:** At this scale, most suns are from twenty to ninety hexes in diameter. (Our own sun is fifty-six hexes across here.) The gravitational effects are enormous and beyond the competence of this article. If your fleet must go near a star, assess each ship within 100 hexes of a sun one Radiation Damage roll per turn, and double the number of rolls for every successive halving of the distance.

**Optional rule:** Incentive is given here for spreading out. For every ship over one in a given hex (not counting covered ships in that hex’s reserve), add one to the die roll when rolling to hit any ship in that hex using missiles, either nuclear or non-nuclear. Ships clustered that tightly - in a 25,000 kilometer hex - are natural targets for missiles. (Obviously, this rule is for incentive rather than realism.)