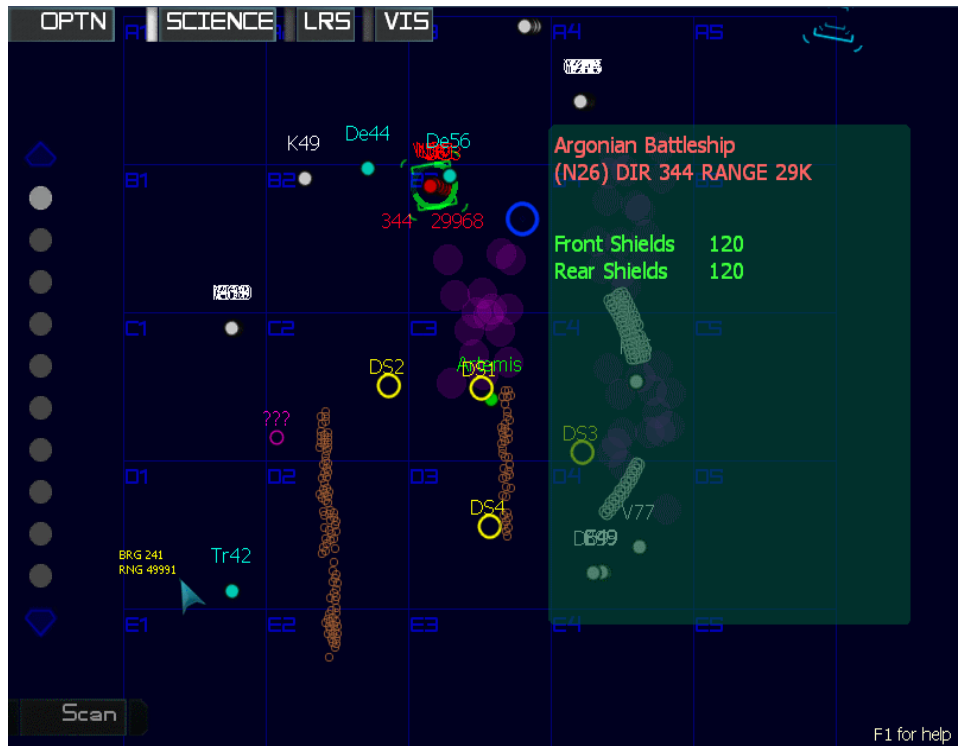


## Science: Abilities and Responsibilities

Science can do the following things

- Use the science scanner to sweep the sector for information. This information includes:
  - Distance and bearing to friendly and enemy ships
  - Distance and bearing to star bases
  - Distance and bearing to mines, anomalies, black holes, etc.
- The science scanner can see through nebulae, and it can see farther than the Long Range Scan when using limited sensors.
- When scanning enemy ships the science scanner shows the ID of each ship, and the strength of its front and rear shields. A bar graph depicts the shields' ability to absorb damage at different beam frequencies. The higher the bar the stronger the shield at that frequency, and conversely, the lowest bar is the weakest shield frequency (and therefore the optimal beam frequency to do maximum damage).



## Science: Basic Play

As a Science Officer, remember that scanning is your friend - it gives you a wealth of information on your target. Scan everything you can as soon as you can. **The second scan of a ship is the most important** as it shows the frequency the Weapons Officer's beams should be set to for the most damage.

The Science Officer has access to more information than any other player. Develop a sense of what information would be helpful to whom, and be ready to provide it at the moment it is needed. Handy things to be ready to provide:

- If coming out of combat in battle-ready shape: Bearing to the next cluster of targets
- If coming out of combat damaged: Bearing to the nearest star base (and/or the nearest star base with nukes)
- If getting ready to make a long transit: Location of any anomalies near the route to pick up on the way
- If entering combat: Composition of the fleet, most dangerous ship, weakest ship, and shield frequencies for each.

The long range scan only shows colored blips with target designations. Only Science can see the type of ship that each blip represents. Remember the hierarchy of enemy ships and help your captain pick his or her battles carefully:

- Cruisers are weakest,
- Battleships are in the middle,
- Dreadnoughts are the strongest.

In combat, knowing the enemy's shield weaknesses is very important. Poor use of beams can result in dealing just 37.5% the damage that would otherwise be possible. Therefore, it is imperative that the Science Officer coordinate with the **Weapons Officer** to adjust the ship's beams to match the weakest frequency of the enemy shields. This requires that the Science Officer keep track of the various enemy ships and their frequencies.

Faction	Ship	Front shield	Rear shield	Turn rate	Top speed	Primary beams	Damage	Cycle time	Range	Secondary beams	Damage	Cycle time	Range	Other abilities
Player	Light Cruiser	80	80	0.004	0.6	2 forward	12	6	1000					2 tubes
Player	Scout	60	60	0.006	0.8	1 forward	12	6	1000					1 tube
Player	Battleship	250	150	0.004	0.6	4 forward	12	6	1000					2 tubes
Player	Missile Cruiser	110	80	0.004	0.6									4 tubes
Player	Dreadnought	200	200	0.003	0.5	2 forward, 1 rear	12	6	1000	1 forward	20	6	2000	3 tubes
Ally	Base	400	0											
Ally	Transport	40	40	0.002	0.3									
Ally	Destroyer	80	80	0.002	0.7	2 forward	7	6	1000					
Kralien	Cruiser	40	40	0.002	0.3	2 forward	1	6	1000					
Kralien	Battleship	80	80	0.002	0.3	2 forward	1	6	1000					
Kralien	Dreadnought	120	120	0.002	0.3	2 forward	1	6	1000	1 rear	1	6	1400	
Arvonian	Fighter	15	15	0.01	1.2	2 forward	0.5	5	800					
Arvonian	Light Carrier	120	120	0.003	0.3	2 forward, 2 rear	1	6	1200					
Arvonian	Carrier	200	200	0.003	0.3	4 forward, 2 rear	1	6	1400					
Torgoth	Goliath	350	350	0.002	0.3	4 forward, 2 rear	1	6	1200					1 tube
Torgoth	Leviathan	400	400	0.002	0.3	2 forward, 2 rear	1	6	1100	1 forward	2	6	2000	1 tube
Torgoth	Behemoth	600	600	0.002	0.3	6 forward, 4 rear	1	4	1000					1 tube
Skaraan	Defiler	250	100	0.004	0.8	2 forward	1	6	1200					Jump drive, cloaking
Skaraan	Enforcer	300	150	0.004	0.8	2 forward, 2 rear	1	6	1000					Jump drive, cloaking
Skaraan	Executor	350	300	0.004	0.8	2 forward	3	6	2000	1 rear	3	4	1400	Jump drive, cloaking
Torgoth torpedo launchers have a damage of 30, cycle time of 30 and range of 5000														
All weapons fired from player torpedo tubes have a range of 5400														
Player homing torpedoes have a damage of 20, nukes and mines 160 and ECMs reduce by half the enemy shield strength														
The damage of enemy beams is equal to the value shown in the table multiplied by the difficulty level (maximum multiplier of 5)														