PR Ranking Notes

Made by xVarz#8404. These notes are simply a compilation of my own research, testing, and thoughts, and do not necessarily reflect what is actually optimal, especially for *your* armoury. This document assumes that you are **aiming for a competitive rank** (i.e. aiming for near-optimal scores), and have the armoury, kiting, and knowledge to match. This document may mention but does not focus on budget runs or advice for underdeveloped armouries. Feel free to contact me on the official or community GFL Discord servers if you have any feedback or questions.

Terminology

Before diving into the details, to reduce the number of basic questions, here is some of the terminology used in the document:

• // TODO: add more terminology

General Overview

Annotated map by Jesse
Map with enemy IDs on Pengu

PR returns to the single ranking map design, this time called City of Nightmares. The map is relatively large compared to recent rankings, and is effectively a distorted 10x10 grid with 4 distinct regions in the northwest, northeast, southwest, and southeast. The map lasts for 10 turns, is a day map, and allows up to 10 echelons to be deployed (includes G&K, SF, and HOCs); the total HOC limit is 3.

The ranking map is largely deterministic, with most enemies on Expand, Alert, Patrol, or Garrison logic. To that end, for map strategy, there are no major reset points excluding player mistakes. Furthermore, the spawn variance for PR is incredibly small, with the spawns on any given helipad per turn having a CE difference less than 1000.

Much like in DR Hole 2 or MS Hole 2, a given player's score cap is primarily determined by the depth of their armoury, affecting the viable echelons that can be run, the number of repairs needed, etc. However, unlike MS Hole 2, PR's map is very tight on AP, and can actually serve as a very nice strategy exercise, even if only as a one-off because of its largely deterministic behaviour.

The score cap for the map is 2.35m with the current highest scoring strategy known, with spawn variance totalling around only 10k. The score cap breakdown is as follows:

- Supply line points 365000
 - Connected starting T1, never lost. See <u>Map Mechanics</u> below for details.
- Modified Isomer scoring 110000
 - Command Post is worth 10000 points
 - Heavy Heliports are worth 7500 points (4 captured)
 - Normal Heliports are worth 5000 points (14 captured)
- Radar nodes 605000
 - Construct 2 data stations on T1 20000 + 170000
 - Construct 4 data stations on T2 40000 + 300000
 - Construct 1 data station on T3 10000 + 65000
- Prespawns 203238

Deathstacks: 84000
NW prespawns: 31253
SW prespawns: 38451
NE prespawns: 38384
SE prespawns: 11150

• Spawns - 1084867 (min is 991472, avg is 996101)

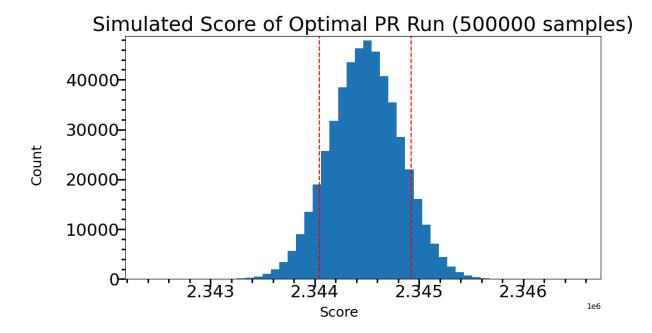
o Bosses: 84000

NW heavy helis: 275160 (302421 theoretical)

NW normal helis: 167954SW heavy heli: 66972

- SW normal helis: 188516 (203160 theoretical)
- NE heavy heli: 60051 (67312 theoretical)
- NE normal helis: 188363 (219444 theoretical)
- SE heavy heli: 30219 (33833 theoretical)
- SE normal helis: 23632 (52476 theoretical)
- Losses -19000
 - 4 retreats on helipads, 10 retreats elsewhere

Leaving aside the absolute maximum and minimum scores, the actual spawn variance is closer to 2000 points across the entire reasonable range. The dotted red lines are at the 10% and 90% percentiles, meaning 80% of the scores fall within *less than 1000 points*.



Map Mechanics

NPC Echelon and Radar Construction (NEW)

This map has Dandelion in the ranking map as a controllable NPC echelon with 3 stacks of Phantom Stance per turn (that is to say, the NPC can take 3 free moves every turn), starting on the H8 radar. Note that Dandelion **immediately dies** if you attempt to fight with her.

Beyond serving as free AP, Dandelion is required in order to construct buildings on the 7 radar nodes across the map that assist the player in various ways. They are located on:

Northwest: B2, C3Southwest: C6, C8Northeast: G3, I3

Southeast: H8

Dandelion must stand on the radar node to convert it to a building of your choice (converting a radar to any building gives 10000 points). The available buildings are:

- Transfer node: allows Dandelion to teleport from anywhere on the map to the transfer node, and for echelons to teleport between transfer nodes. Limited practical value, not recommended.
- EMP spawner: generates one EMP bomb per turn that can be picked up (identical to PL's EMP spawner). Each EMP used gives 5000 points. Recommended for underdeveloped armouries to build one to ease the boss and deathstack fights.
- Data station: gives big points every turn, but does not give any battlefield advantage. The default option.
- Repair station: gives 3 free repairs and resupplies. Not recommended.
- Blow the node up: gives 20000 points, and causes all enemies within 2 nodes to receive the EMP debuff. Not recommended.

Data stations are effectively consoles, with the option to "download data" from them, available once per turn. On the first turn that the data station is activated, downloading data is worth 5000 points. This amount increases by 1000 every subsequent turn until capping at 10k, giving 10k on every following turn.

Teleporters

There are two pairs of teleporter nodes connecting the northwest to the southwest and the northwest to the northeast, located on B4/B5/C4/C5 and D2/D3/E2/E3. Stepping on the entrance node will teleport the echelon (or enemy) to the exit node. One "bridge" connects the northwest to the southwest, while the other connects the northwest to the northeast.

Initially, the teleporters go from B5 to B4 and D2 to E2, but every 2 turns, the teleporters will change directions and shift over by one node, going from C4 to C5 and E3 to D3. See below:

Turn	NW-SW teleporter	NW-NE teleporter
1-2	B5->B4 (left node, going up)	D2->E2 (upper node, going right)
3-4	C4->C5 (right node, going down)	E3->D3 (lower node, going left)
5-6	B5->B4 (left node, going up)	D2->E2 (upper node, going right)
7-8	C4->C5 (right node, going down)	E3->D3 (lower node, going left)
9-10	B5->B4 (left node, going up)	D2->E2 (upper node, going right)

Note that if the exit node is occupied by an echelon, walking onto the entrance node will not teleport the echelon until the exit node is vacated. This also applies to enemies of the same

faction. This can be used to save AP by camping multiple helipads from the same node, killing two enemies with 1 AP, taking a shortcut, and so on.

Supply Line

The number of points the supply line gives per turn is 5000 * (number of turns supply line has been connected). On Turn 3, this multiplier becomes 10000. Then, assuming the supply line is connected on Turn 1, the points given at the start of each turn is:

Turn	Points
2	5000
3	10000
4	20000
5	30000
6	40000
7	50000
8	60000
9	70000
10	80000

Note that this means that if you connect the supply line 1 turn late, you lose 80k points. Letting the line break costs even more points.

Enemies

Enemy node IDs are 4801xx, hereby referred to as IDxx.

The helipad spawns have first movement priority, so it is very easy for clogs to occur if the surroundings aren't regularly cleared.

Annotated Enemy IDs by RevenantXIII

New Enemies

wait for blt's doc lol

Deathstacks

GFAlarm list for deathstacks: 480141,480144

240k Deathstack - ID41, 240000 CE. Prespawned on D4. The "gatekeeper" to the northwest area (Garrison movement logic).

2x Cherubs, 20x Gunners, 2x Pyxis, 3x Gladiators. Only the Pyxis have force shields, at 30%.

// TODO: add commentary

Some known solutions:

- RMB-93 + Defender + RPK203 + Grape + HP35, 3* Para; no HOC
 - sync 203's skill with HP35's active proc at 6s to kill both Gladis, letting Grape's next skill shots kill the Cherubs
 - Gunner EVA debuff procs HP35's passive while RMB doesn't dodge in the first place, letting RMB mitigate Cherub damage even more
- M500 + M870 + SAA + Grape + MG4, any fairy; no HOC
 - M870 can be replaced by HP shield SGs or other damage reduction SGs
 - MG4 can be replaced by Kord or any other high DPS MG with 15+% armour tiles
- Alchemist + 2 Nemeums + 1 Manticore + 1 Jaeger; no HOC

300k Deathstacks - ID44/45, 300000 CE. Prespawned on E7 and J5. The E7 one Patrols between E6 and E10 (first movement is down), while the J5 one Patrols between F5 and J5 (first movement is left).

1x Cherub, 20x Gunners, 4x Doppels, 2x Grenadiers, **3x Gladiators**, 20x Defenders. Gladis, Doppels, and Cherub have 50% initial force shields.

These fights are the only reason why HOC support is needed at all in this map. // TODO: add more commentary

Some known solutions:

• M4 + Webley + Kolibri + Calico + LTLX, 5* Parachute Fairy; Mk153 support

- Alchemist + 2 Nemeums + 1 Manticore + 1 Jaeger; 2B14 support
- Alchemist + 2 Nemeums + 1 Manticore + 1 Jaeger, Defend chip; Architect support
- Alchemist + 1 Nemeum + 1 Manticore + 1 Goliath Factory; Architect support

Note: if using Alchemist, Goliath Factories are **highly** recommended.

Bosses

GFAlarm list for bosses: 480142,480143

Grig - ID42, 360000 CE. Spawns on D4 (if empty) after 3 radars have been activated (generally Turn 2). No escorts.

Boss skills:

- Skill 1: ICD ?? seconds, CD ?? seconds. Locks onto the lowest HP unit and deals surehit damage. Also mark that unit to debuff its RoF. Prioritizes unmarked units. When all units are marked, only damage is inflicted.
- Skill 2: ICD ?? seconds, CD ?? seconds. Deals multiple damage instances that ignore armour and apply Shred status to targets in the frontline. Shredded targets constantly lose small amounts of HP. Very easy to avoid.
- Skill 3: ICD ?? seconds, CD ?? seconds. Deals multiple surehit damage instances to the row directly in front of her. Very easy to avoid.
- Skill 4: activates at 75%, 50%, and 25% HP remaining. Attempts to assassinate one link of the highest DPS unit, dealing one instance of 999 damage. After the target loses a link, generates an HP shield and permanently buffs her RoF.

Either burst down the boss before too many skills are used or use link DPS like Nemeums; dies pretty easily if you pass the DPS check.

Known solutions:

- M4 + Webley + Kolibri + Calico + LTLX
- Alchemist + 2 Nemeums + 1 Manticore + 1 Jaeger
- Pekola + LTLX echelon
- Scarecrow + 3 Nemeums + 1 SWAP Ripper/Aegis + 1 Dinergate
 - SWAP Ripper preferred over SWAP Aegis

Bramedb - ID43, 480000 CE. Spawns on D4 (if empty) after 6 radars have been activated (generally Turn 2-3). No escorts to start, but she summons escorts during the fight (including Strelets at the very start).

Boss skills:

 Skill 1: ICD 4 seconds, CD ?? seconds. Becomes intangible and connects her to up to two random summons, giving them 10% max HP shields and buffing their FP, RoF, ACC, EVA, and ARM; when these summons die, the boss takes 30000 damage and becomes tangible again (early). Duration lasts for a few seconds.

- N.B.: there is a chance that the boss may take too long to become tangible again, making your echelon walk through her, causing a loss. Reset if you end up moving forward for more than a few frames.
- Skill 2: ICD 8 seconds, CD ?? seconds. Stops summoning escorts and attempts to
 "connect" to two random allies (tiles occupied will light up). Three seconds later, stun the
 targets on the marked tiles and increase the summoning "tier" by the number of targets
 stunned. Stunned targets have their stats debuffed based on their class: Skill
 CD/EVA/ACC/HP Shield/FP/ARM for HG/SMG/RF/AR/MG/SG. The debuffs last for the
 rest of the fight(?). Resumes summoning escorts when the marked tiles are removed.
 - N.B.: The stun multiplies your doll's movespeed by 0 to prevent them from moving, but additive movespeed buffs such as Calico's Skill 2 can allow you to continue moving (but not shoot or use skills).
 - // TODO: test if debuffs are permanent
- Skill 3: continuously summons escorts every few seconds based on the current tier (indicated by the red number floating above her head).
 - o Tier 0: Strelets
 - Tier 1-2: Strelets + Sentinels
 - Tier 3-4: Strelets + Sentinels + Murats
 - Tier 5: Strelets + Sentinels + Murats + Metalmax
- Skill 4: activates at 70% and 40% HP remaining. Grants self an Orthrus-style HP shield (reduces all incoming damage to 1) and Taunt status. Further locks on and connects to the unit with the highest DPS, increasing the summon tier by 1, and dealing continuous constant damage to this unit (~20 damage every 0.5s). This damage continues until the target dies or the shield is broken.
 - N.B.: The HP shield can be broken with bullets or by purging it with T-Dolls such as LTLX or Pekola. De Lisle is not recommended for this task because the HP shield procs twice.

// TODO: add more commentary on the boss

Known solutions:

- M4 + Webley + Kolibri + Calico + LTLX
- Any typical SF echelon (ringleader + 1 Nemeum + 1 Manticore + 1 SWAP Aegis + 1 Jaeger/Jaguar)
- Any mobile GnK echelon (ARSMG, 5HG)
- Pekola DPS echelon
 - Can be annoying to proc Peko RNG passive sufficiently often

Northwest

GFAlarm list:

480134,480135,480136,480137,480138,480180,480181,480182,480183,480184,480185,48018 6,480187,480188,480189 Defined as the square from A1 to D4. Generally the hardest area, with the most difficult prespawns and spawns. Last turn spawn CE is 90k/108k normal/heavy. Enemy table:

Turns	Heavy helis	Normal helis
Prespawns	1x ID31, 1x ID32, 2x ID33	
1-3	ID37, ID38	ID34, ID35, ID36
4-6	ID86, ID87	ID80, ID81, ID82
7-10	ID88, ID89	ID83, ID84, ID85

M4ex needs to sacrifice one HG against ID82 when debuffed.

Do not take ID86 under debuff, too much damage taken. Pray for ID87 instead, it's much easier. For ID88 and ID89, a non-debuffed RFSG or a debuffed M4ex with LTLX can take 3. A 4HG M4ex can only take 1 under debuff.

FP debuff and RFSG echelons recommended here.

High rarity Parachute RFSG echelons can take one ID83-85 debuffed.

Southwest

GFAlarm list: 480160,480161,480162,480173,480174,480175,480166,480167,480178,480179

Defined as the rectangle from A5 to E10. Average difficulty prespawns and spawns, mostly consisting of low armour large group enemy spawns, but one high armour enemy spawns in turns 7-10. Last turn spawn CE is 54k/72k normal/heavy. Spawn table:

Turns	Heavy helis	Normal helis
Prespawns	2x ID11, 2x ID12, 2x ID13, 1x ID14, 1x ID16	
1-3	ID17, ID18	ID14, ID15, ID16
4-6	ID66, ID67	ID60, ID61, ID62
7-10	ID78, ID79	ID73, ID74, ID75

M4ex cannot take more than one ID78 when debuffed.

Northeast

GFAlarm list: 480170,480171,480172,480163,480164,480165,480176,480177,480168,480169

Defined as the rectangle from E1 to J5. Average difficulty prespawns and spawns, mostly consisting of "large" enemies (e.g. Doppels, Cherubs), escorted by high armour (Metalmax). Very weak late turn spawns. Last turn spawn CE is 54k/72k normal/heavy. Enemy table:

Turns	Heavy helis	Normal helis
Prespawns	2x ID21, 2x ID22, 2x ID23, 1x ID24, 1x ID25	
1-3	ID27, ID28	ID24, ID25, ID26
4-6	ID76, ID77	ID70, ID71, ID72
7-10	ID68, ID69	ID63, ID64, ID65

Alchemist strongly recommended for handling ID76 and ID77. For everything else here, apply RFSG.

Southeast

Defined as the square from F6 to J10. Trash mobs, barely worth any points, nothing of note. Last turn spawn CE is 18k/36k normal/heavy. Enemy table:

Turns	Heavy helis	Normal helis
Prespawns	2x ID01, 2x ID02, 2x ID03	
1-3	ID07, ID08	ID04, ID05, ID06
4-6	ID56, ID57	ID50, ID51, ID52
7-10	ID58, ID59	ID53, ID54, ID55

Echelons

This ranking features many Gunner + Metalmax comps, primarily countered by using SGs to armour tank everything; MGs are useful for armour tiles and penetrating through Metalmax's super high armour, but RFs can be used quite effectively to eliminate the backline, leaving only enemies that SGs can tank forever. There are also often high threat backline enemies (Cherubs, Grenadiers, Doppels) that require RF targeting. As such, the primary echelon type used in this ranking is RFSG and MGSG. Using 1 SG (HP shields or armour self-buffs), 1 MG (armour tiles), and 1 RF (Grape is best, RFs that have good enemy targeting logic second priority) as the core, the remaining two slots can be filled by another MG for further armour stacking, an HP shield HG, etc.

The strongest dolls for this ranking are M4, Grape, and LTLX, dupes recommended where possible. Some of the highly recommended but still replaceable dolls are MG4 Mod, MG338 (PR clear reward), and Pekola.

Regarding new equipment: flashbangs are highly recommended for almost every SG, but at the end of the day, they still aren't mandatory; MGs want SLAP ammo wherever possible (green SLAP is good enough as a substitute); Sniper Ammo is nice to have but not very important.

For SF echelons, Scarecrow is nigh indispensable for her map skill, and Alchemist is still unparalleled in combat despite the new anti-Alchemist enemies. Other ringleaders can be used, and typically bring 1 Nemeum, 1 Manticore, 1 SWAP Aegis, and 1 Jaeger/Jaguar. Note that Grenadiers have amplified damage against machine-type enemies (notably Nemeums, Manticores, SWAP Prowlers, Dinergates/Tarantulas), but are still countered by SWAP Aegis (just put it on 6 and let the rest of the team do its thing).

// TODO: add writeups for different echelon types

Example echelons

CosmicArcher's Pastebin of comps and VODs: https://pastebin.com/Tcmpz3Vv

Hoshiyomi no dupe echelons (Hoshi pathing) https://nga.178.com/read.php?tid=28268630

- 1. Alchemist
 - a. Alchemist, 2x Nemeum, 1x Manticore, 1x Jaeger, Ample Fuel, Frugal Mobilization
 - b. A typical Alchemist comp, primary combat echelon, will fight up to 7 times without resupplying.
- 2. "HOC"
 - a. Architect, 1x Nemeum, 1x Manticore, 1x SWAP Aegis, 1x Jaguar

b. Typical SF comp, deployed near the supply flag and supports Echelon 1 for the 300k deathstacks.

3. Scarecrow

- a. Scarecrow, 1x Nemeum, 1x Manticore, 1x SWAP Aegis, 1x Jaguar
- b. Typical SF comp, mostly active in the northeast.

4. M4ex

- a. M4, Kolibri, Webley, K5, LTLX, 5* Fervour Para
- b. LTLX is highly recommended in the M4ex. K5 is here because CN still didn't have K5's tilebug fixed by this point, replace with Calico. Can handle almost every normal enemy even while para debuffed.

5. M500 HP shield spam

- a. Grape, MG338, SAA, M500, M870, 5* Damage 2 Para
- b. The strongest RFMGSG echelon, very strong even while debuffed, but will take lots of damage if fighting Gunners while debuffed. Basically copied from MS.

TTAF

- a. RMB, Defender, MG4, Nagant, VP70, 5* Armour 2 Para
- b. Uses RMB+Defender + MG4/Negev + 2 FP debuffer HGs to effectively be the only echelon capable of no damaging Gunner fights while debuffed (Armour 2 talent needed). Used to complement Echelon 5's paradrop abilities.

7. Pekola DPS

- a. Pekola, General Liu, P22, Python, SAT8, 5* Fervour Para
- b. Uses General Liu to control Pekola's lowest % HP targeting, allowing the echelon to quickly eliminate the front or backline as needed. This echelon is focused around DPS over survivability. Note that Pekola is effectively married to a 5* Fervour talent fairy because it gives her 3 buff stacks immediately at the start of the battle. Primarily active in the northeast.

8. RFMGSG

- a. RFB, RPK203, RPK16, Makarov, DP12, 5* Armour 2 Para
- 9. RFMGSG
 - a. Lewis, LWMMG, Kord, Sei, Elphelt, 5* Damage 2 Para

10. RFMGSG

- a. Negev, 416, MP446, HS2000, AA12, 3* Damage 2 Para
- b. Echelons 8-10 are all RFMGSGs (RFB counts as an RF, 416 is... an RF too, I guess) all have mediocre combat abilities while debuffed. Primarily active in the northeast and southwest.
- 11. Para dummy
- 12. Para dummy
 - a. Can be SL4 paras. Retreated without combat.

Ameth comps (Ameth pathing)

https://www.bilibili.com/video/BV1TQ4y167Sq

- 1. Scarecrow / Agent
 - a. Scarecrow, 3x Nemeums, 1x SWAP Ripper, 1x Dinergate, Phantom Stance, Weaken (used for Gladiators)

- i. Redeployed after killing Grig
- b. Scarecrow, 1x SWAP Aegis, 2x Manticore, Phantom Stance, Frugal Mobilization
 - i. Declogs Alert prespawns, captures A10.
- c. Agent, 1x SWAP Aegis, 1x Manticore, 2x Jaeger, 1x Dinergate, Phantom Stance, Frugal Mobilization (used over another Parachute because ech takes 6 fights)
- 2. M500 HP shield spam
 - a. M200, Hanyang, Python, SAA, M500, 2* Para
- 3. Para / Alchemist
 - a. 416, Grape, Grizzly, P22, KSG, 2* Para
 - i. Parachutes once on T1 for AP, para refreshed and used again on T2. Retreats on T2 after declogging A4.
 - ii. Grape lowers para rarity requirement, but should be replaced by other RFs at higher para rarities.
 - iii. M870 is preferred, but armour buffing SGs like KSG, M590 are usable. Flashbang is mandatory.
 - b. Alchemist, 2x Goliath Factory, 1x Nemeum, 1x Striker, Lone Wolf, Ample Fuel
 - Deployed on T3, kills NE 300k deathstack.
- 4. RFMGSG
 - a. RPK16, Kord, Grape, P22, LTLX, 3* Para
- 5. TTAF
 - a. MG4, Grape, P22, RMB, Defender, 5* Para
- 6. M4ex
 - a. M4, Kolibri, Webley, K5, LTLX, 5* Para
 - b. LTLX is highly recommended in the M4ex. K5 is here because CN still didn't have K5's tilebug fixed by this point, replace with Calico. Can handle almost every normal enemy even while para debuffed.
- 7. RFSG
 - a. IWS, General Liu, Five-seveN, Px4 Storm, DP12, 5* Para
- 8. Pekola DPS
 - a. Pekola, Grape, Python, Calico, Welrod, 5* Para
 - b. Combat reqs actually aren't very high, only needs to be able to handle Bramedb and take a few easy para debuffed fights. Can replace anybody but Peko and Calico; Grape can be swapped out for an AR or RF.

C.

- 9. Para / "HOC"
 - a. RPK203, Grape, HP35, RMB, Defender, 5* Para (can be 3*)
 - Retreats after taking a T1 northeast normal spawn (refreshes para for next turn use).
 - ii. Retreats again on T2 after killing the 240k Pyxis and shifting the swap chain (refreshes para for next turn use).
 - iii. Retreats again on T3 after declogging the northwest helis and allowing Dandelion to reach the B2 radar.
 - iv. 203's DPS is even higher than what you would expect theoretically b/c burst mode can be synced w/ HG skills

- b. Architect, 1x Nemeum, 1x Manticore, 1x SWAP Aegis, 1x Jaguar, Weaken, Fighting Spirit
 - i. Deployed on T3 to support Alchemist for the 300k deathstack fight. Nemeum can be swapped for SWAP Dragoon, Jaeger preferred over Jaguar (AoE is kinda useless for the backline threats).
 - ii. Primarily used in the northeast after deathstacks killed.

10. RFSG

- a. RFB, Grape, P22, Makarov, SAT8, 5* Damage 1 Para
- b. Primary early turn declogger in the northeast. The echelon needs backline targeting; chips make RFB's DPS higher than most RFs.
- c. With a 5* Para, Grape *should* be replaced by a self-buffer RF; at lower rarities, sticking with Grape is best.

// TODO: add more details

Map Strategy

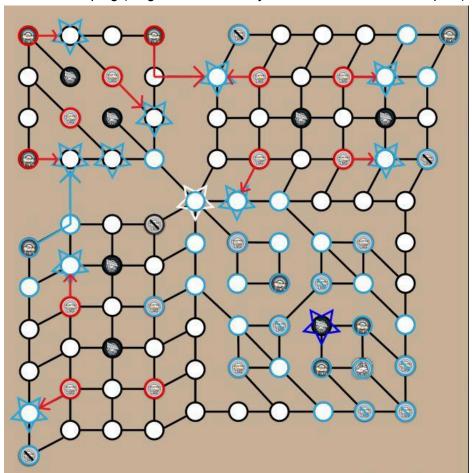
Reasonable tryhard strategies use 8 GnK + 1 SF + 1 HOC, while the more extreme strategies can use up to 9 Parachutes + 3 SF (swapping out two Parachutes mid-run), of which each Parachute (without any rarity requirements) is worth ~10k points, and every combat-ready echelon affects around 20-40k points.

Turns 1-4: top priority is securing the supply line: each turn of not connecting the supply line is ~45k point loss. Use Dandelion to set up data stations on every (accessible) radar (and download data every turn), and declog the northwest heavy helis. At this time, the other helis should not get clogged yet.

Turns 5-7: capture the four limited helis in the southwest and northeast (rough order is D5 -> J4 -> E1 -> A10).

Turns 8-10: set up helipad surround captures and final camping positions.

Last turn camping (diagram shamelessly stolen from Hoshi's NGA post):



B4 and E2 can each camp two helipads on the last turn thanks to the portals. The northeast and southwest heavy helipads are worth more points to capture than for their spawns (but the southwest heavy heli is part of the B4 double heli setup). Also note that the northeast and

southwest normal helis are barely worth less points to capture than their spawns, so if an echelon has taken too much damage, it may be worth it to simply capture the helipad.