Potato's MvM Servers Present: Operation Titanium Tank

Introduction:

Welcome to our first MvM wave creating contest! We have seen people in the past make "*tours*" of missions for fun, so we figured: Let's make MvM tour creation a full-fledged community event!

Directions:

1. Select a **standard, functional, mostly-finished, <u>community-made</u>** MvM map that **you did <u>not</u> contribute or collaborate** towards its creation.

2. Create an <u>appropriately difficult</u> *and* <u>fun</u> **advanced difficulty** mission (pop file) for that map.

3. Submit your <u>completed</u> pop file by **<u>Dec 15th, 2017 @ 11:59 PM ET</u>**. No late submissions!

4. If you are ambitious, you may submit up to **two (2) <u>unique</u>** pop files to this contest.

Rules:

- **You must start from a blank pop file for this event! No reusing old work!**

- **No collaborations are allowed**! This is an individual task!

- You may use the in-game bot templates, bot templates you made in the past, publicly available bot templates, and/or ask permission to use bot templates from other people.

- Your mission **CANNOT** be for a Valve MvM map! This is a community event!

- Your mission **CANNOT** be for a MvM map you helped create in any way!

- Your mission **MUST** be for an MvM map that has proper detailing, lighting, and clipping with functional entity work and navigation. We will **<u>not</u>** accept pop files for far-from-complete and/or broken/dev textured maps. If you are unsure if a map is eligible for this contest, **<u>ask us</u>**!

- Your mission must be at an advanced-level difficulty **based on <u>today's</u>** MvM balance/standards.

- Your mission cannot exceed **9 waves** in length, including boss waves.

- Your entire mission must last for **30 ± 5 minutes** of <u>**successful wave**</u> time. The 5-minute buffer is to accommodate for skill variations of the various advanced-level teams that play your mission.

- Your advanced mode mission must be **properly balanced enough** such that all team compositions consisting 1 of each class and appropriately skilled players can **comfortably** beat it.

- Your pop file must load correctly on the server with no syntax errors, no hung up waves (including infinite support hogging all bot slots), no checkerboard icons on the hud, no incomplete wave bars, etc. It must be functional and error-free syntactically and semantically.

- If you submit 2 pop files, they must be **completely different and unique** missions.

Judging:

- I (**Hydrogen**) will be the **only** contest judge and will select the winners of this contest. As both the contest owner and the judge, I'm also ineligible from participating in this contest.

- Each mission will be checked for compliance of the contest rules and then judged holistically. The scoring guidelines are provided in page 4 after the FAQ section.

- I will provide all submissions with constructive, detailed feedback, and each participant will have **one opportunity** to correct any mentioned issues and resubmit their mission for rescoring.

- Broken or rule-infringing missions will not receive any "*grace period*" after the deadline – the resubmission opportunity *is* your grace period to fix any problems and resubmit for scoring.

Testing:

- There will be daily testing gamedays at **2 PM ET** (*afternoon shift*) and **10 PM ET** (*night shift*). Each gameday will last 2-3 hours. You can request an "*off-shift*" test by asking our group chat.

- Use the gamedays to receive valuable feedback from other players and myself to improve your mission and raise your chances of winning! Demo recordings and feedback files will be available.

- **DISCLAIMER**: If I say something about your mission, it may be a good idea to heed my advice. However, if I don't say anything, don't assume I imply any form of approval or disapproval.

Prizes:

- All **participants** who submit a pop file that obeys all the contest rules (i.e. isn't disqualified) will receive an in-game **Titanium Tank Participant Medal** specifically for this event! (*Courtesy of Valve, SedimentarySocks, NeoDement, and Gadget!*)

- We will do something special with the winning pop files of this contest. **Up to six (6)** pop files will be chosen as winners. We will reveal what will happen to those pop files after judging ends.

FAQ:

Q: Pop files? What are those? How do I make them?
A: Pop files are the scripts that Mann vs Machine uses to know what robots to spawn during the course of a wave. They're highly customizable and allow for a lot of creative, interesting, and sometimes goofy things to happen that you could not do in PvP. For this contest, we're asking you to create your own advanced difficulty pop file to help build a community MvM tour. Look at the in-game pop files or pop files from other community MvM maps to understand the syntax and how they work. Trial and error with them to see how your changes to the pop file affect the spawning and stats of the robots. If you have questions, stumble into problems, or need help developing your mission, ask us in our group chat.

Q: What do you mean by "you took no part in creating" for the map?
A: If you made some part of the map in hammer, made pop files for the mapper, made props specifically for the map, or did *some* type of work that would count you as a contributor for a map, you cannot submit a pop file for that map for this event. We want to encourage people to make waves for other people's maps and work with other maps' layouts! (Another wording is: "Bring people out of their comfort zone.")

Q: Do I need permission from the map maker to make a pop file for their map for this contest?
A: No. You can pick any community MvM map you like so long as it follows the contest rules. You're **not** making a mission *for* the map maker; you're simply using their map as a foundation to build your mission on. The pop file you create is owned by you, not the map maker.

Q: Why is there a restriction on the level of completeness a map has?
A: A good tour can only feature maps that are "nearly finished". We don't want missions for maps that have dev textures or unfinished layouts. While no map is complete, perfect, or error-free, it should be "finished enough" for it to be aesthetically pleasing and playable. If you found a map you want to make a pop file for but aren't sure if it complies with this rule, ask us! **It is your responsibility to ask us about a map. If the map you choose is ineligible for this contest, your mission will be disqualified!**

Q: Does the map have an impact on how my mission will be assessed?
A: *Indirectly*, yes. The map and mission work together to provide the overall MvM experience. If the map is unfun to play on, your mission, in turn, will also be not too fun to play. Make sure you are aware of the map's gameplay design factors (e.g. sightlines, chokes, etc) when writing your mission. You can bring your mission to testing to check if the map you chose for your mission is an asset or a liability to your waves. See the judging rubric on page 4 for more information about how the pop files will be assessed.

Q: What do you mean by "successful wave time"?
A: Our servers have a wave timer equipped that measures the duration of each wave and the overall mission. We don't want missions that are too long or too short. If a team completes all the waves without ever losing, the time they spent fighting robots should be within the given time constraint. Failed waves and setup time do not count towards the total mission duration, hence the term "successful wave time."

Q: What does the "all team compositions" rule mean?
A: Any team that has 1 of each class, properly skilled players, and appropriate loadouts should be able to beat your mission. If there's any team setup consisting of 1 of each class that can't win your mission (or can win it, but it feels harder than advanced), your mission infringes the contest rules.

An informal interpretation of this rule is: "Beating a mission by beggar's stacking, abusing the medic's shield, constantly resetting the bomb or knocking it back, and/or canteen spamming doesn't mean it's a fairly balanced advanced mode mission."

Q: Why does the contest allow the participants to resubmit their pop file for rescoring again?
A: This isn't a competition on who is the best mission writer - this is an event to make the most fun MvM missions for people to play. We want to give people a fair opportunity to take in feedback and use it to improve their mission so everyone can put their best foot forward before the winners are chosen.

Q: Do all contest participants receive the medal or only the winners?
A: All contest **participants** will receive the medal, provided their pop file is eligible for the contest (abides by the rules). We will do something special with the winners' pop files after judging is completed.

Q: Can I make endurance-mode style missions (longer waves but less waves in total) or a wave 666-style mission (1 super long wave)?
A: Yes, so long as they abide all the contest rules (including the duration!)

Q: Can I submit a custom bot templates pop file alongside with my main mission pop file?
A: Since the contest only requires one mission, we do not want bot template pop files. We suggest you put all your bot templates inside the *Templates* section of the main pop file and keep everything to 1 file.

Judging Scoring Rubric

- **(40%) Fun:** Are the waves fun to play? Do any of them seem boring or tedious? Do players overall felt like they had an enjoyable time playing your waves or was it a waste of their time? Would players be willing to replay your mission again for fun? *This criteria is holistic.*

- **(25%) Balance:** Are the waves fairly balanced towards a wide variety of teams? Can advanced-level players comfortably beat the waves without resorting to cheesing tactics such as canteen or airblast spamming? Do the waves enforce a specific meta or strongly encourage a specific class? Do the robots behave more-or-less as the players expect them to, or do they have crazy or unexpected abilities that compromise the balance and integrity of the mission?

- **(20%) Creativity:** Do the waves offer a variety of robots with unique skills or are they all plain or generic? (e.g. uses only Valve robots) Do the robots fit the theme of the map? Do the waves offer some interesting obstacle(s) that players need to cooperate as a team to surmount? Are the robot spawns arranged in a unique manner such that they synergize the stampede or create some special "effect" (*loosely defined*) that they couldn't accomplish otherwise/on their own? Does the mission offer something unique that makes it stand out from the other entries (in a good way)?

- **(15%) Length:** Is the overall mission long enough? Do the individual waves have a good variety of length/duration? Do the waves constantly engage the players, or are there awkward pauses or tedious sections that drag out too long for the sake of meeting/stalling the duration requirement?

- **(*) Technical:** Do the waves run correctly from start to finish? Does the server load the pop file without reporting any errors? Are cosmetics/particle effects on the bots kept to a minimum?

The above is **not** a comprehensive rubric, but it should give a good idea on what we're looking for.

Each criteria will be rated out of 10 points. After scaling each score by the criteria's weight, the final score is out of 100 points. The technical criteria has no weight or score per se, but will be imposed as a point deduction (penalty) from the final score if problems are found. A scoring table may look like this:

Criteria	Fun	Balance	Creativity	Length	Technical	Total
Raw Score	8	6	9	10	*	*
Scaled Score	32	15	18	15	-5	**75 / 100**

We will assess all the missions, provide our detailed feedback, and give every participant one (1) revision opportunity. All the judging reviews for all entries will be posted simultaneously, and every participant will have **72 hours** to revise and resubmit their mission. We will judge the resubmitted pop files and write up new assessments. The final score of your pop file will be the average of your two scores. If your second score ends up being lower than the first score, we will keep your first score and the first version of your pop file. If you do not wish to revise and resubmit your pop file, your first score will stand as final.

Although the map isn't part of the scoring rubric, the map will, without a doubt, play a role in how fun and balanced players will perceive your mission as. While map-specific issues like z-fighting, unclipped stairs, broken holograms and the like aren't part of your mission's score, questionable map design like crazy sightlines and chokes, extreme elevation differences, long paths to the hatch, and shoddy bot navigation can impact your score as they will affect the balance and fun of your mission. As the mission maker, the challenge in this contest is to leverage the map's features in a positive manner to make your mission as entertaining and unique as possible. There's no MvM without the map and the pop file.

Logic for Selecting the Winners

Suppose we get the following submissions for maps 1-8 and missions A-N (no maps or missions in particular are being implied). See the table below for a hypothetical contest submission pool:

Map	Mission(s)
1	A
2	B, C
3	D, E, F
4	G
5	H
6	I, J, K, L
7	M
8	N

If the judging concludes that the missions from highest to lowest score are in this order:

B, D, C, G, N, L, K, H, A, N, E, K, F, M, J, I

Then the winning map-missions pairs of this contest are:

2-B, 3-D, 4-G, 8-N, 6-L, 5-H, 1-A

Although missions C and K were rated better in quality than mission A, since mission C's map was used by mission B and mission K's map was used by mission L, they are not chosen as winners. If a map already has a winning mission, the remaining missions for that map are ineligible from winning (i.e. if multiple missions for a map "win" the contest, only the best mission for that map is declared the winner).

You can see from here that map 1 and mission A won the contest because 2 other participants who made better missions than mission A made their pop file for a map that another winner already claimed. This means that it's possible for a map to win the contest even if it doesn't have one of the best missions for it.

Our best advice to winning the contest is to explore around all the well-made community MvM maps that interest you, then pick one of them and work on a mission for that map. Don't pick a map based on its popularity ("hype", workshop ratings, etc). The highly-rated maps can be a trap, since many people may use those maps for their missions, which diminishes your chances of winning if you also join them.

Picking the *underdog* (the well-made but not so well-known) maps may raise your chances of winning, in addition to giving those maps more community exposure. If you know people are making missions for the map you want to use, you can still make a mission for that map. However, to win, your mission needs to be **the best** for that map *AND* **one of the best** in the contest overall (you have 2 competitions instead of 1). If you want to raise your chances of winning even further, try to submit 2 pop files to the contest.

We want a tour (showcase) of 6 unique maps with 6 unique missions, not 3 maps where 1 map has 4 missions and the other 2 maps have 1 mission each. The latter would give the map with the most missions the most spotlight, while the former gives many maps equal attention. We think this method of choosing winners is fair to avoid biasing some maps and to support as many community MvM maps as possible.

If we end up with, say, 4 winners instead of 6 with this judging scheme, then we will only declare 4 winners. That's 2 slots going to waste, so pick the map you want to use for your mission wisely!