#### 

Author: Miketan

Mod version: 1.2.2

Released: 30/05/2024

Minimum version required: Phantom Brigade v1.2

# **Installation / Editing**

- Go to PhantomBrigade folder (located in C:\Users[USER]\AppData\Local\PhantomBrigade) and create a folder named Mods inside of it, if not present;
- In the zip archive, extract the whole mod folder (fragmentMod) into Mods folder;
- Find the Missile Launcher "MRV/01 Vanguard" and Enjoy!

More information about Phantom Brigade's Modding System can be found here.

**NOTE:** If an existing version of this mod is installed, please delete the whole mod and replace it with the newest version to avoid any kind of conflict between files.

# **Basic introduction**

The main idea to develop this mod came when I tried, unsuccessfully, to apply the same fragmentation logic used by shotguns as a similar system doesn't officially exists for missile launchers. It made me realize that approach wasn't technically possible as I needed to split the projectile after a set time. The logic used by shotguns only apply instant fragmentation at the moment of firing, mainly because it was implemented for that kind of weapons in mind.

#### Change notes – 1.2.2

- New weapon look using attachment system instead of classic visual system;
- Child projectiles' damage set to 125. Fixed the zero damage in some occasions;
- Adjusted UI trajectory reflecting the real missile guidance;
- Weapon will now get a considerable amount of heat per use;
- Brand new weapon manufacturer: Strel Arms Division;
- Adjusted fragments count to 13.
- Minor Tweaks to fit in PB version 1.3

#### What are the key differences with Legacy code (library mod) and the stock fragmentation?

The main difference, starting from Phantom Brigade v1.2.0, are the following:

- Library mod stopped working as the above mentioned changes made from the update became incompatible with the mod, causing the latter to make the game either freezing or crashing;
- As a consequence stated in the first point, all the custom code in the library mod can't be
  utilized as attachProjectileGuidanceData method (which the mod used quiet well until mod
  version 1.1.4) got some changes too, which is the main issue of it not working properly;
- The changes related to fragment projectiles, fanout patterns and fragmentation delay contained in the mod cannot be used for the reasons stated above;
- As a workaround, the new mod version has implemented its own fragmentation delay and some of the new weapons benefits from this. Stock implementation implemented in PB version 1.2.0 / 1.2.1 shares the same fragmentation principle as fragmentMod, except for some key points:
  - Mod's custom code injects own fanout patterns, while the stock implementation doesn't have. Instead, it creates a single fragmentation mechanism by splitting child projectiles based on input angle (in degree);
  - Both fragmentMod and stock implementation has the function to specify fragment count and fragmentation delay (in seconds);
  - Stock implementation provides more functions like, for instance, to which targets the child projectiles will aim (closest first, furthest units first and so on), while fragmentMod doesn't have such checks;
  - Stock implementation can filter fragmented projectiles' target. For instance, to make child
    missiles target a total amount of enemy units independently (like a real life MIRV Warhead
    acts; independent targeting).
  - o fragmentMod can't repeat fragmentation after the first one, while stock implementation now permits such possibility (and even put a limit to prevent an infinite loop of fragments)

Taking the above mentioned points in consideration, I have reached the conclusion that keeping the library mod is not necessary anymore. 1.1.4 is the last working mod version featuring code injection, therefore If you want to use the legacy mod code, please use it inside Phantom Brigade version 1.1.3.

### 

- Discord user **radionecrotic** for the contribution to legacy fragmentation code.
- Discord user **Ragvard** for guiding me into the attachment system.
- Brace Yourself Games for the awesome game;
- Harmony Framework for making modding possible;

## 

- Credits to me (Miketan) is mandatory for the use of this mod as a dependency for other mods;
- No need to ask for direct permission unless for particular reasons (in that case, contact me)