

Event design – Spikeys

This is a design document for the game Roche Fusion (<http://rochefusion.com>), shared to give insight into the game's development process to those interested. All of the information contained within should be considered work-in-progress. Things may change for a variety of reasons, including but not limited to implementation or balancing issues, not being fun, and user feedback. You can find out how to contact the developers at <http://rochefusion.com/contact>.

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Overview

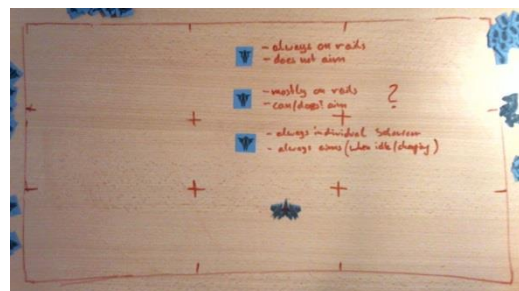
Spikeys are a group of blue enemies that have an iconic design featuring hard angles and spikes. Their fronts split in two, signifying the barrel of their weapon. Spikeys always and exclusively use beam based weapons. The beams always fire from the split front, and the spikey has to rotate to aim.

Generally spikeys move in formations following circles or arcs, firing their lasers randomly or in patterns. Stronger spikeys can occur individually and will fly in randomised small arcs around the edges of the screen, regularly stopping to shoot.

Overall, spikeys mostly take up the upper parts or sides of the screen, and only rarely cover the bottom. There are three spikey enemies, which we will call spikey0, spikey1 and spikey2.

Details

Spikey0 is the easiest of the group. It only occurs in formations and never aims at the player. Its firing direction is determined by where it is in the formation. Their weapons are generally not strong enough to instantly kill the player.



Spikey1 mostly occurs in groups, but can occur individually. They can, but do not always aim at the player before firing. They also use slightly stronger weapons.

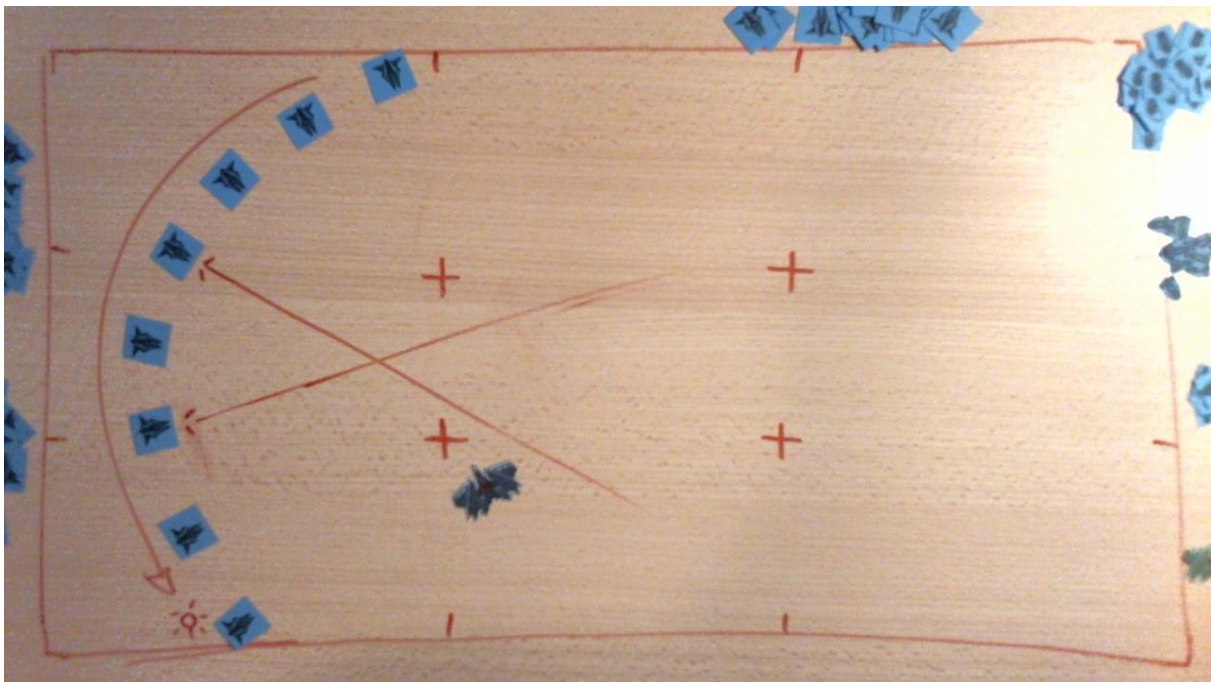
Spikey2 always spawn individually and move on their own. They always aim at the player. These use very powerful lasers can quickly kill the player if hit.

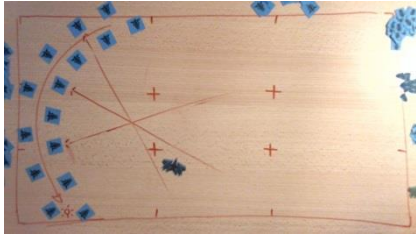
Aiming spikekeys rotate (with some reasonable maximum speed) to face the player while their weapon is idle, charging or cooling down. They do not rotate in the other weapon states.

Patterns

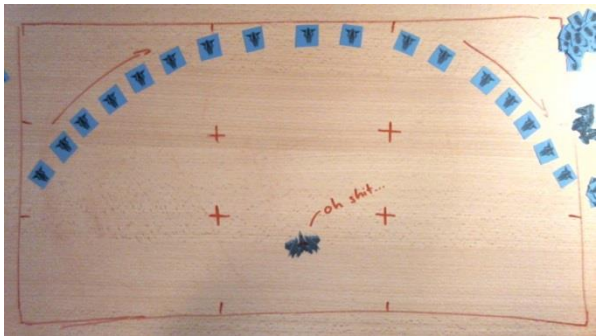
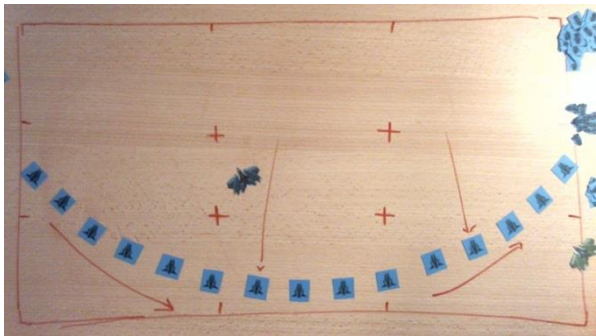
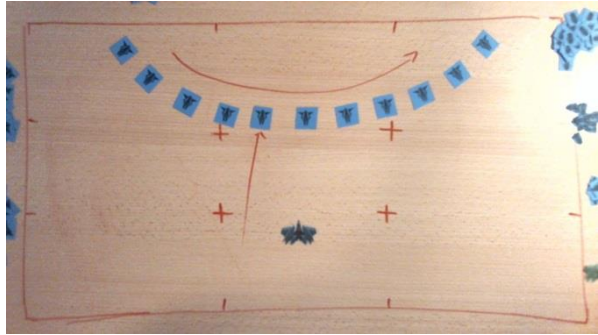
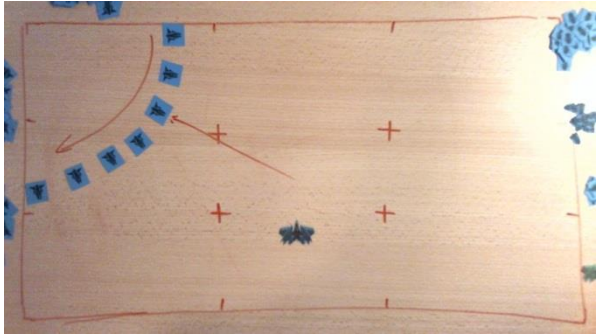
Arcs

The most common formation pattern of spikekeys are arcs. Each pattern consists of an arc spanning part of the screen. They block event generation in the 2 to 5 parts of the screen that they occupy. The spikekeys move along that arc in reasonably tightly packed and regular fashion. Unless they can aim they are always oriented towards or away from the center of the circle of the arc, depending on which side faces the player.



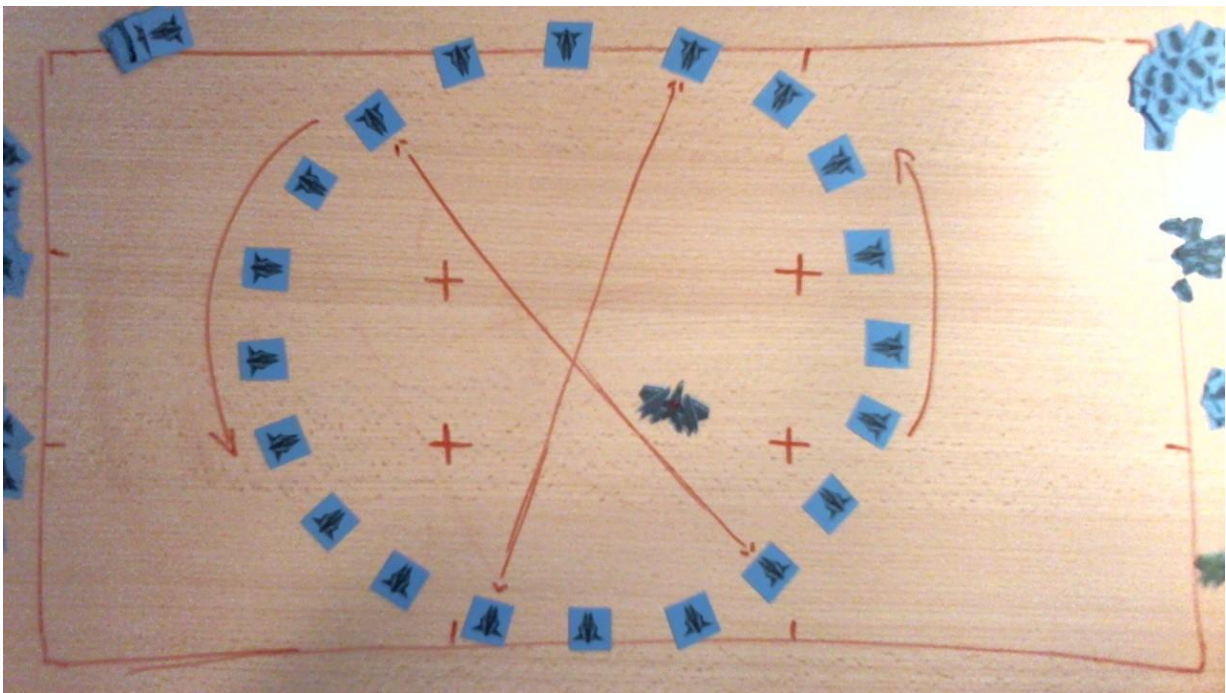


If enough credits are available, a second row of soikeys can be spawned behind the first one. They are offset by half the distance between them, so they can shoot in between enemies. All arcs can be followed either clockwise or counter-clockwise.



Circles

A special rare formation is the circle. The spikeys circle the player in a large circle about the height of the screen. The circle can also spawn with two rows of enemies, and rotate in either direction. To make sure the player is always inside the circle, the center of the circle must be located at about 30% the player's position, relative to the center of the screen. With multiple players, the average player position could be used, though this would allow players to be safe on opposite sides of the screen. The circle could adapt by changing its size if it has to, to encompass both players.



Ideally the spikeys of the circle would have special weapons so that the two opposite ones always fire together and span a beam between them. In general, the circle should only spawn with non aiming enemies, so that the beams will always be rotating and going through the center of the circle.

Individual

Individual spikeys behave very similar to blue drones. They switch between moving a small distance and firing. However, they may decide to move several steps before firing again. Further, they do not move in straight lines, but in arcs, around a point in the center or bottom of the screen. They can move anywhere in the upper, left or right third of the screen.

