DIRTYBOMB®

GAME DESIGN DOCUMENT

INTRODUCTION

We first announced Dirty Bomb on November 29th, 2012. When Richard 'Fluffy_gIMp' Jolly was putting together our crowd-funding Founder's initiative, we thought it would be cool to give players a Dirty Bomb GDD (Game Design Document) for the most hardcore of our backers.

I've been dreading us having to put this together for years. Thanks, Rich!

Why the dread? It turns out that thinking we could provide a comprehensive GDD on Dirty Bomb's release is kind of a microcosm of our journey with the game. GDDs were a standard in the game industry for decades and reflected the necessities of a boxed-product delivery, publishing-based development cycles... which is the world that we'd all come from! The reality that we walked into with Dirty Bomb's development was radically different as it was constantly shifting and evolving, making our older documentation practices unsustainable. Our documentation wiki for the last few years has been a living and breathing thing, hugely dissimilar from GDDs of old.

With that said we've packaged up the more interesting bits of the Dirty Bomb team's internal wiki documentation in a GDD-like format. It's not particularly reflective of our day-to-day processes, but we have built it in a way that will offer our Founders and fans an insight into how we drove our decisions with Dirty Bomb.

We hope you enjoy it, and as ever, #playdirty!

-   Exedore

IMESS · KODY · waste dog
MEllo-HYPE · Moobs
BEEP
shoe. · toy.V · MATST!
RJolly · Toonie · Moltove · Locki · Strand Man
Kage · AK · Druss
Grant · BITKARI · Geekybaking
Popey · Smooth
MAKOLICIOUS · ARS-kop
EL_Droidio
Lord Waffle × · HARCONEM
Naxus
Icky
DJ KANGABANGA
Jesse
PitBoss · Sweet Giblets! · NEK
JeST
JudgeD · MassE
The White Lycan · c4Te · Cheeth Dude
ANGELO · BBFACE BYNZ · ELECTRIC SHEEP
LUPUS NOMINIS · RRZDOZ · LoveDuckie · KahMela

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GAME PILLARS

OVERVIEW

"Dirty Bomb is one of the most challenging shooters available in terms of skill ceiling and tactics, and creates lifelong friendships through blockbuster multiplayer combat and championing team play"

DB is intended to be the **embodiment** of the Splash Damage studio ethos:

- **Blockbuster IP:** Dedication to growing DB as a brand to rival any other
- **Mission Control Mindset:** Shared responsibility with our partners for the operation of the game and its quality of service
- **Production/Development Maturity:** Routinely review practices to always be increasing effectiveness
- **Put the Player First:** Analyse player actions and actively engage them to create the best player experience possible

WORLD OF MERCS

This pillar is all about the characters in DB, and how we make them stand out from other games and at the same time reflect the culture and people of Splash Damage.

Each Mercenary is an event and brand of its own; they continuously evolve the game
- Events are themed to Mercs, and they evolve the game's narrative

Mercs possess unique combat roles and abilities that cater to different playing styles
- Mercs are defined by their unique abilities when it comes to gameplay

Characters with irreverent tone and personalities that extend beyond the battlefield
- Encourages relationships between Mercs and fans, fan art and fan fiction

Believable and non-objectifying portrayal of complex characters
- A modern, cosmopolitan, "London" portrayal that we can be proud of

THE DIRTY SECRET SAUCE

This pillar is all about our core gameplay and our level design formula; our modern take on the ET formula with high movement and high accuracy gunplay.

Quick and responsive old-school PC gameplay, with lots of movement possibilities and high weapon accuracy
- Runs through game mechanics, client performance and server performance

High skill ceiling: many degrees of mastery in the various game mechanics and maps
- Mechanics are designed to allow for players to develop emergent strategies

Enables and rewards a high level of team coordination (but not requires)
- An organised team can be a well-oiled machine, but there's still room for individual heroics

Complimentary Merc mechanics allow for meta-game growth
- The introduction of Merc drafting in the first FACEIT Ranked season will be a game-changer

Objective-based gameplay focuses the action and lends contextual weight
- Water-cooler moments that are easy to tell stories about

All parts tuned to encourage teamplay and build friendships, providing a path to high level clan play
- The big area of focus as development moves forward

WE ARE COMMUNITY

This pillar is about remembering our studio roots within the community, being player advocates, and making them part of the SD family as much as we try to do that with our developers.

End-to-end NPS focus
- In game NPS is evaluated daily, and is critical to service and development planning

Down-to-Earth interaction with our community that reflects our studio DNA
- Transparency within reason, but "on-script" when in public spaces regarding potentially contentious issues, and by approved staff

High degree of VIP Community involvement in private testing and tuning
- Verifying work via the PTS, and leveraging the VIP Community to increase balance and overall release quality
- Make them feel welcome in our studio and within our processes

Lots of interaction with players on forums and social channels
- Staff need to feel invested in the reception and sentiment towards the features that they are responsible for, but need to learn to always keep it cordial

Exciting game updates unearth secrets and bring new information to light, keeping players on their toes
- Involve players in the game's events and world, and let them impact it when possible

Regular Dev Videos offer bite-size insights into what the team is working on
- Offers greater freedom to show WIP features, warts and all, to our most ardent fans

CORE GAMEPLAY

OVERVIEW

The core gameplay is the moment-to-moment action in the game, primarily the moving and shooting mechanics (ability mechanics are under the Merc umbrella). They are mostly about personal mastery and overcoming your opponent, but the seeds of team play will also be in the core gameplay mechanics as it's where the various states of incapacitation live. Incapped teammates of course gives an opportunity for alive teammates to get them back on their feet!

GOALS

- Dirty Bomb's core gameplay should encourage players to play together in ways that are both complimentary and directly competitive
- Dirty Bomb's core gameplay should have a polished and rewarding UX, consistent with our aim of delivering AAA quality
- Dirty Bomb's core gameplay should have a high mechanical skill ceiling both in terms of shooting and in moving, that encourage both individual mastery and cooperative mastery
- Dirty Bomb's core gameplay outcomes should be clear to players, so that they know why they were beaten and how they can adjust
- Dirty Bomb's shooting mechanics should have the same level of polish as most modern shooters, but have a bit more of an old-school mentality that shows that the game doesn't take itself too seriously
- Dirty Bomb's movement mechanics should have a degree of playfulness and not need to feel overly realistic
- Dirty Bomb's core gameplay should be responsive to player input, even at the price of utmost fidelity
- Dirty Bomb's shooting mechanics should feel reliable and consistent, with modifiers used rarely, and if they are it is very clearly communicated to players and their opponents

USER STORIES

- As a player, how Dirty Bomb's core gameplay mixes old school and newer sensibilities in movement and shooting makes it my favourite game ever!
- As a player, I love that Dirty Bomb has mechanics that feel somewhat similar yet different to what is available in other shooters
- As a player, I love that there are always areas to improve my skills in the core gameplay
- As a player, I like that even when I get shot I don't fully die immediately, and a friend can pick me up
- As a player, I love that there are long jumps and wall hops, so I can try new things in the maps and can also use them during combat
- As a player, I like that when I lose in combat I can see why, and I know how to improve in the future

WEAPON MECHANICS

OVERVIEW

The target for Dirty Bomb is to have gun-play that bases itself on the core foundations of old-school shooters but modernises it for today's audience.

CORE MECHANICS

Moving and Shooting

Winning a gun-battle relies as much on player movement during combat as it does player accuracy. Shooting from the hip while running must be a viable tactic *(if not the most viable tactic)* in our game.

Time to react

Getting the drop on someone does give the initiator an advantage but much less so that in other FPS's. Mostly this is down to the longer time-to-kill of the standard weapons.

Weapon Accuracy

Due to the fast-paced movement, the weapons needed to be very accurate to hit anyone. This is achieved by having a very accurate first bullet in almost all cases (excluding jumping) but also having a relatively low maximum bullet spread during sustained fire.

Iron-sights

Iron-sights are a recognised game mechanic in nearly all modern FPS's, they are something we should include but not something the players should be reliant upon. Iron-sights need to be an alternative method that players can use, without giving them an advantage over those who prefer not to use them.

Weapon 'Feel'

One area where we must change things is in the look & feel of the modern weapons. This boils down to having increased fire-rates and the addition of recoil, something which other contemporary shooters rely heavily on.

Variation

Since the introduction of additional weapons will be one of our strongest Merc differentiators / selling points, we will need to be able to give each weapon a unique feel. Ideally something recognisable from other games.

EDITABLE PARAMETERS:

A quick breakdown of what weapon behaviours we want to use in Dirty Bomb.

Player Stances

Every other weapon accuracy variable should support a value for each of these stances, although most will simply use a default.

Switching between stances should not be instant and takes time based on a defined spread increase/decrease rate.

- Default - *used if no other stances are set*
- Crouch Stationary
- Crouch Move
- Standing Stationary
- Walking
- Running
- Sprinting
- Air
- Iron-sighted / Scoped
- Air + Iron-sight / Scoped

  ⚠ When iron-sighting players should be limited to walking speed
  ⚠ When iron-sighted, weapons have practically zero spread

Any advanced locomotion (wall hop etc.) could use one of these stances for accuracy purposes, they don't need their own values.

State Changes

 When transitioning from one state to another, the percentage between min-max spread should be maintained set as the new spread - *rather than simply keeping the current actual spread value*

- This is so that action like crouching while firing from a running state actually has some impact in reducing current spread.
- The inverse should also be true that starting to run from crouched fire should also increase the current spread.

Weapon Spread Behaviour vs Movement States
(at 50% maximum spread [when running] due to sustained fire)
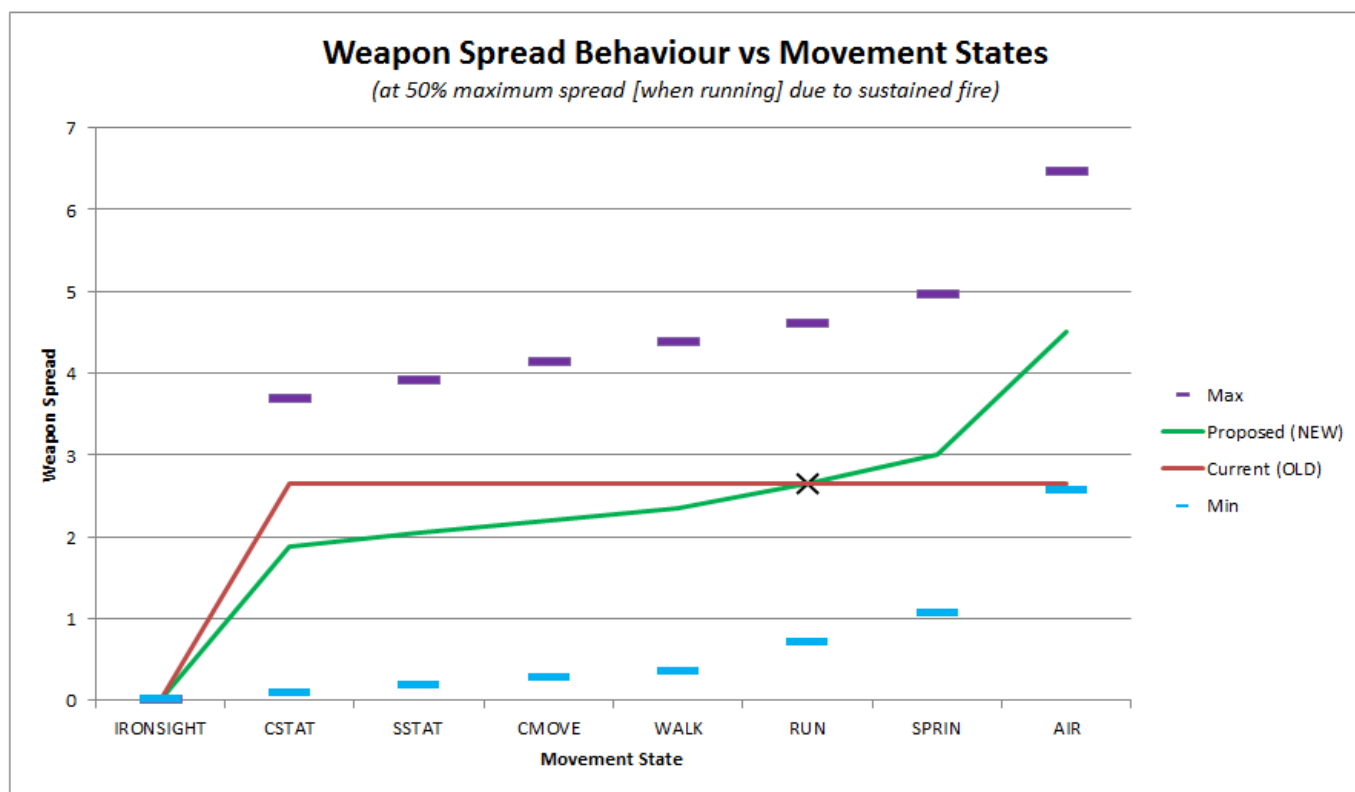
Bullet Accuracy

Minimum Spread
The starting spread of the weapon, with a different value for each stance.

Maximum Spread
The maximum spread of the weapon after prolonged fire, with a different value for each stance.

Spread Increase Rate
How much the spread increases after each bullet is fired

Spread Recover Rate
How much spread is reduced (per-second) when the player is not firing. During firing there should be no spread decrease.

Spread Transition Rate
m_SpreadIncreaseRates[0] and is used to allow over-time transitions between states. This is the same as the recover rate.

Spread Recover Delay
How long after the previous bullet was fired, before recovery begins. Rather than an instant recovery.

Recoil Additive

This is used to set a target recoil offset every time a bullet is fired and should be definable as both a **min & max vertical climb**, and a **min & max offset** (from directly upwards) in degrees. This should be split up into a minimum and maximum value from which a point is randomly chosen each time a bullet is fired, as a replacement for the recoil being linked to spread.
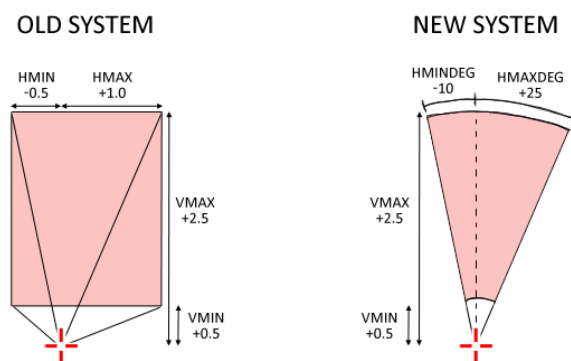
i The pink zone shows where the crosshair can recoil to after the bullet is fired.

Recoil Rate

This is how quickly the weapon recoils (in degrees per second) towards the offset defined by recoil additive.

Every time a bullet is fired the original weapon/crosshair should begin recoiling/travelling towards the new target recoil location at a set speed. If it reaches this point before a new bullet is fired, then recoil recovery begins. If a new bullet is fired before it reaches this point, then a new target recoil location should be set and the old one forgotten about.

Other Variables

Damage

How much damage each bullet does.

Number of Projectiles

How many projectiles are fired with each shot. Useful for shotguns.

Fire Rate

How long between each shot is fired, should support automatic and semi-automatic (aka single shot) weapons.

Semi-Automatic

Weapons should be either fully automatic (the default) or flagged as semi-automatic.

When a weapon is flagged as semi-automatic, only a single bullet is fired each time the mouse button is pressed (even if held down). The player must always release and press the button again to fire another shot.

The Fire Rate should still be used to define the delay-time between shots, so the player cannot fire too quickly using 'hacks' like binding the mouse-wheel scroll to fire.

NB. If the game receives a new fire input before the delay-time is over it should be ignored entirely, to fire another shot successfully the player needs to press fire again after the delay has expired.

Burst Fire Count

How many bullets are fired per trigger press. Once initiated, this burst will be non-interruptible - see Burst Fire

Burst Fire Interval

The length of time between the last bullet of the previous burst and a new burst being fired - see Burst Fire

Range

There should be 5 definable values that are related to range, per weapon.

- Instant Hit Damage *(unreal default)*
  - This is the damage the weapon does before it reaches minimum range

- Minimum Range
  - This is the value *(in units)* where the damage falloff begins

- Maximum Range
  - Damage will falloff linearly (towards the minimum damage value) until it reaches this range

- Minimum Damage
  - A fixed value of damage that the weapon does at and beyond maximum range

- Range *(unreal default)*
  - Defines the maximum length of the weapon trace, beyond this the weapon does 0 damage
  - This will usually be defined as the maximum visible distance we have on any map, as we never want a weapon to do 0 damage if the player it hitting the target
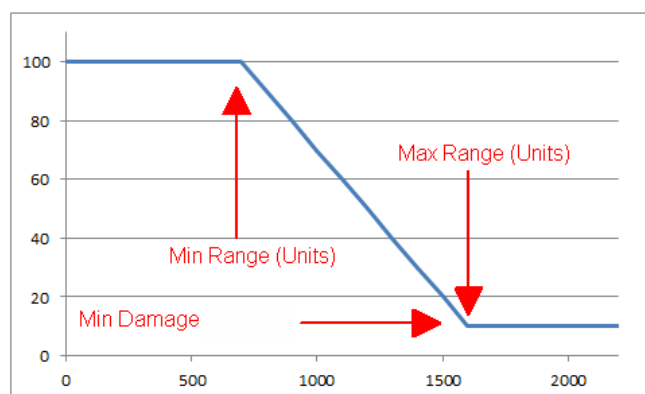
Reload Time

How long it takes the weapon to reload, this value should be able to speed up / slow down the animation length.

Reload Fraction

Percentage of the reload animation must be played before the reload is 'complete' if the player was to cancel the reload via weapon switch etc.

Avoids annoyance of accidentally cancelling long reloads and having to start at the beginning. Would ideally have 2-3 'stages'.

BOLT-ACTION

DESIGN

- After firing each round:
    1. The player should pull the bolt back to eject the old round
    2. Push the bolt forward the chamber a new round

- After firing the last round in a magazine
    1. The player should pull the bolt back to eject the old round
    2. Remove the old magazine
    3. Insert a new magazine
    4. Push the bolt forward the chamber a new round

- Weapon **doesn't** come out of scope for bolt action

- Weapon **does** come out of scope for reloads
    - After a reload the player is not automatically put back into sighting

BURST FIRE

OVERVIEW

A quick outline of the burst-fire mechanic we want to use for some weapons.

BEHAVIOUR

When a weapon is defined as burst fire, it should behave in the following manner.

1. Pressing fire initiates a (*uninterruptable*, *by any means*) burst of rounds
   a. The number of rounds in defined by **Burst Count**
      i. **Projectiles Per Shot** will nearly always be 1 but we may want to be able to fire 2 simultaneous rounds for each individual 'count' of the burst
   b. The time between rounds being fired is defined by the **Fire Interval**

2. When the burst is completed, the player must wait to initiate the next burst
   a. The minimum time between bursts is defined by **Burst Interval**

Some points:

- Once a burst has been initiated, there should be no way to interrupt the firing.
  ⚠ Actions that usually interrupt firing (*sprint & switch weapon for example*) should be **DELAYED** until the burst is complete
- The spread, recoil etc. behaviour of the bullets must be the same as firing the same number of bullets without a burst
- The ammo count must behave as expected, I.E. a burst of 3 bullets removes 3 ammo from the magazine
- In the rare case of not having enough ammo for a full burst, only the number of available rounds must be fired, prematurely ending the burst

DESIGN VALUES

Burst-Fire
A **checkbox** needs to be added to all weapon packages that defines whether a weapon is burst-fire or not.

Burst Count
This determines how many rounds are fired as part of each burst.

Burst Interval
This defines the minimum time between bursts.

SHOTGUNS

PUMP-ACTION

After each shot is fired, the handgrip will need to be pumped back & forwards to eject the used shell and to chamber a new one.

Firing the final shell should not trigger the pumping action, as this will be performed after the reload, at which point the final shell will be ejected.

RELOADS

Shotguns shells should be reloaded individually, one after the other.

If the shotgun was completely empty, a pump-action should be performed after the reload
If the shotgun wasn't empty, the pump-action has already taken place and doesn't need to be performed.

The player should be able to interrupt the reloads by pressing fire or switching weapon
Interrupting the reload by firing should not be instantaneous, as the player will need to finish inserting the current shell before being able to fire. They will also need to pump the handgrip to chamber a round if the weapon was empty.

PELLET BEHAVIOUR

Rather than randomly distributed, pellets should be **evenly** distributed across the full spread of the weapon, to make the weapon feel more consistent.

This is achieved by have pre-defined pellet patterns for each weapon.

DAMAGING OTHER PLAYERS

SUCCESSFUL HIT FEEDBACK

With our many different weapons, body-types and hitboxes, we need a solution for successful hit feedback *(are my bullets hitting the target or not)* that is both obvious and intuitive.

In **priority order**, we want to communicate:

> **Hit Feedback Priorities**
>
> 1. Did I hit the target or not?
> 2. Headshots dealing more damage than a body-shot *(dependant on weapon locational damage modifiers)*
> 3. Limb-shots dealing less damage that a body shot *(dependant on weapon locational damage modifiers)*
> 4. The number of pellets per-shot that have successfully hit a target
> 5. The damage falloff of rounds at range *(dependant on weapon range values)*
> 6. The different character health values

FUNCTIONALITY

Ideally the system will scale based on how much damage is dealt to the target as well as considering the total health pool of the target.

- Also, a bullet impact to the **head** should appear much deadlier than one hitting the **body**. But also, lower damage **limb shots** are also considered.

- This system should also support weapons like shotguns, considering how many **pellets** hit and providing that feedback to the player.

- It should also provide the player with the feedback that their bullets are affected by **damage falloff** at range

- In this way, a bullet should sound & appear less deadly when it hits **Rhino than Proxy**, since it removes a lower percentage of health.

- We should have a scale of 0% to 100% health removed from the target

- If this isn't possible for technical reasons, then the amount of damage dealt (*rather than % removed*) should be used for the scale
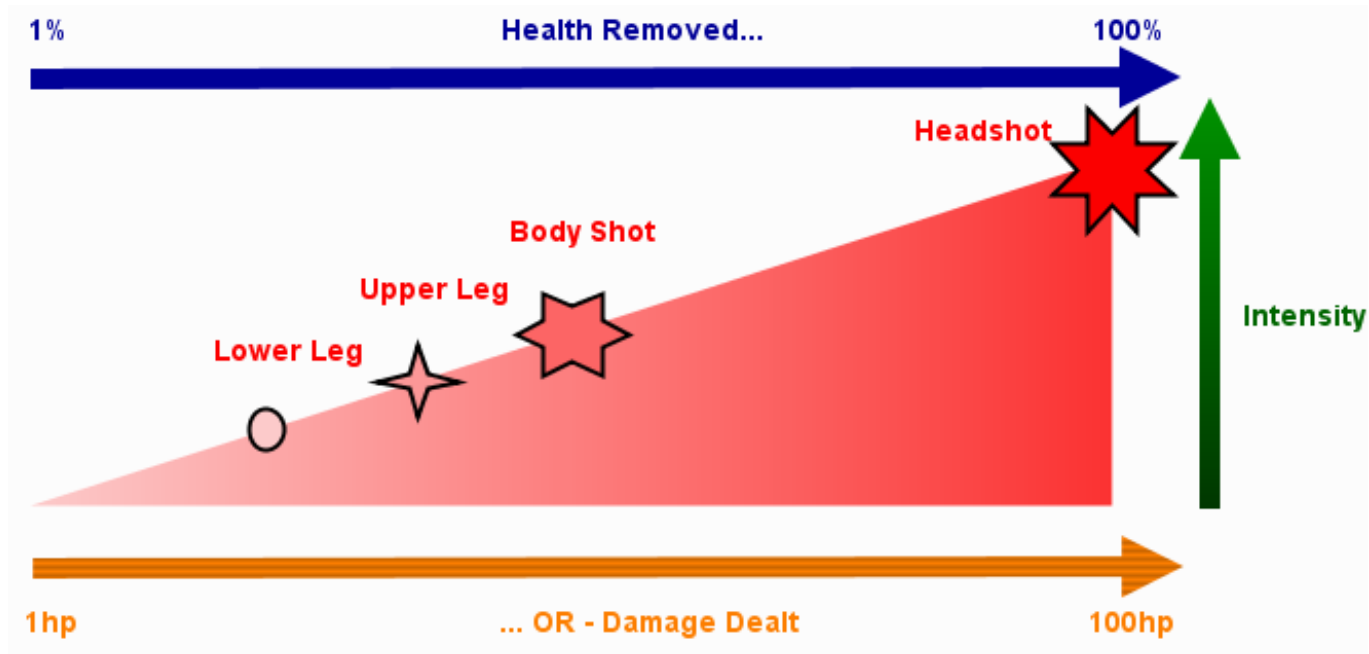
AUDIO

The first port of call should be audio, but we must respect both the hardcore player and those who want immersion.

With that in mind we should maintain two version of scaling audio for successful hit:

- One that mimics (*but amplifies*) the sound of a bullet impacting a soldier
- Another that pays homage to the hit beeps of our previous titles

⚠️ Audio should not play for team-mate hits unless FF is ON. In this case we need a specific, single 'BAD!' sound for hitting team-mates.

VISUAL EFFECTS

The scale of the impact effect on the player is the most obvious thing to change here.

- Low damage impacts could use the smallest scale effect we have.
- High damage impacts could use a much bigger, bloodier impact.

HUD
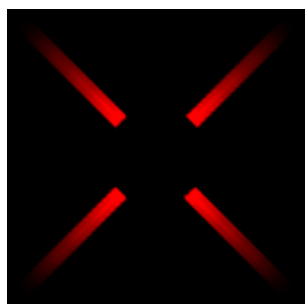
- A red validation hit feedback
- Scaling with damage

LONG JUMP

OVERVIEW

The Long Jump is a move that players can perform by crouching just before jumping.

This increases the impulse of a jump and can be used to gain extra height and distance.

LONG JUMPS

Sprint Window

Most players will be releasing the Sprint key to press Crouch, so we need a global **window after releasing Sprint where the player doesn't lose any speed**, as long as they are still holding Forward (*not pressing Back either*) and not performing an action that breaks Sprint.

- This momentum should be conserved for a set amount of time (default **0.166s**?) before regular deceleration kicks in.

    - This needs to be long enough to allow players to **Release Sprint** -> **Press Crouch**
    - This will be increased/reduced to make timing important

- ⚠ This window only exists if the player was at full Sprint speed when they let go of sprint

Crouch Window

Since Crouching currently almost-instantly kills any momentum, the next step would have **tapping Crouch / going into Crouch Conserve Sprinting momentum** for a short amount of time

- This momentum should be conserved for a set amount of time (default **0.166s**?) before regular deceleration kicks in.
- This needs to be long enough to allow players to **Tap / Hold Crouch** -> **Press Jump**

⚠ This window only exists if:
- The player pressed Crouch direct from full Sprint speed
    - OR
- The player pressed Crouch while in the first Sprint Window described above

Jumping

Jumps performed during Crouch window should have an **increased multiplier to the jump impulse**, allowing players to jump higher and further

- The initial default impulse increase should be **35%** ?

Globally; if the player Jumps while Crouching then they should **perform a jump and be automatically stood up**, ignoring the crouch input until they press it again.

- ⚠ This prevent the player flying through the air in a Crouched state
- ⚠ This also means a second crouch input is required to perform a crouch-jump

ANTI-SPAM FUNCTIONALITY

This system involves reducing sprint speed by a set amount, to negate the speed bonus gained from the long jump.

It also prevents consecutive long-jumps as the player takes time again to reach sprint-speed.

To communicate the 'B' penalty state we will need the following:

- ⚠ Audio: **Heavy breathing audio** during the duration of the 'B' state (*with an obvious transition when it ends?*)

WALL JUMP

OVERVIEW

The Wall Jump is move that can be performed when mid-air next to (or touching) a wall. The player kicks out at the wall and pushes away and upwards.

Wall Jumps are mainly used to gain extra height & distance whilst already in the air by pushing off against a nearby wall, they can also be used to change direction when in mid-air.

WALL JUMPS

INITIAL PROTOTYPE
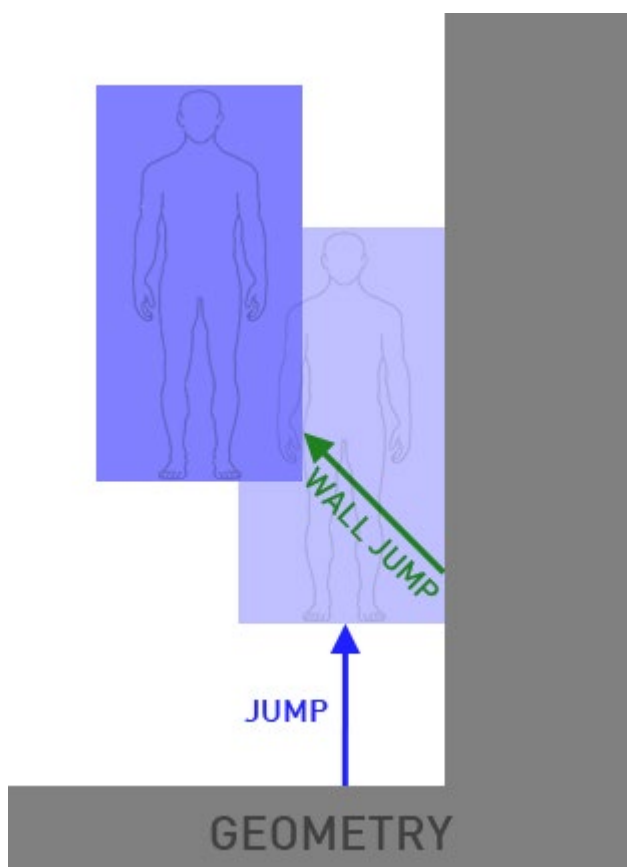
Simply put, if the player presses jump while they are mid-air next to a wall - **an impulse is applied perpendicular to the wall surface, with an upwards angle of 45 degrees** from horizontal.

⚠️ This upward angle of 45 degrees should be offset from the horizontal, rather than the perpendicular to the surface itself

Any current player movement must also be conserved, **the impulse should add to** (*rather than override*) **any existing horizontal or vertical momentum**.

⚠️ The Force of the impulse applied when Wall Jumping needs to tweakable on a per-character basis

Players can Wall Jump in any direction, left, right forwards or backwards, opposite to the wall they are in-close proximity with.

WALL CHECKS

We don't want players to have to be in direct contact with the wall to perform a Wall Jump.

To give the player some buffer-room to making a Wall Jump, **a 'Valid Wall Jump' volume should be created** that geometry (collision) needs to be intersecting for a Wall Jump to be performed. This would need to be slightly larger than the player collision box.

⚠ The width (or the extra 'buffer' amount) needs to be tweakable

Geometry that is only touching **the very top or bottom of the player collision box needs to be ignored** when attempting to perform a Wall Jump. This is to prevent jumps from being performed off tiny steps or the top of door frames.

This would be achieved by the valid check volume only covering a small section of the player model, as seen below.

⚠ The Min and Maximum heights of this volume needs to be tweakable
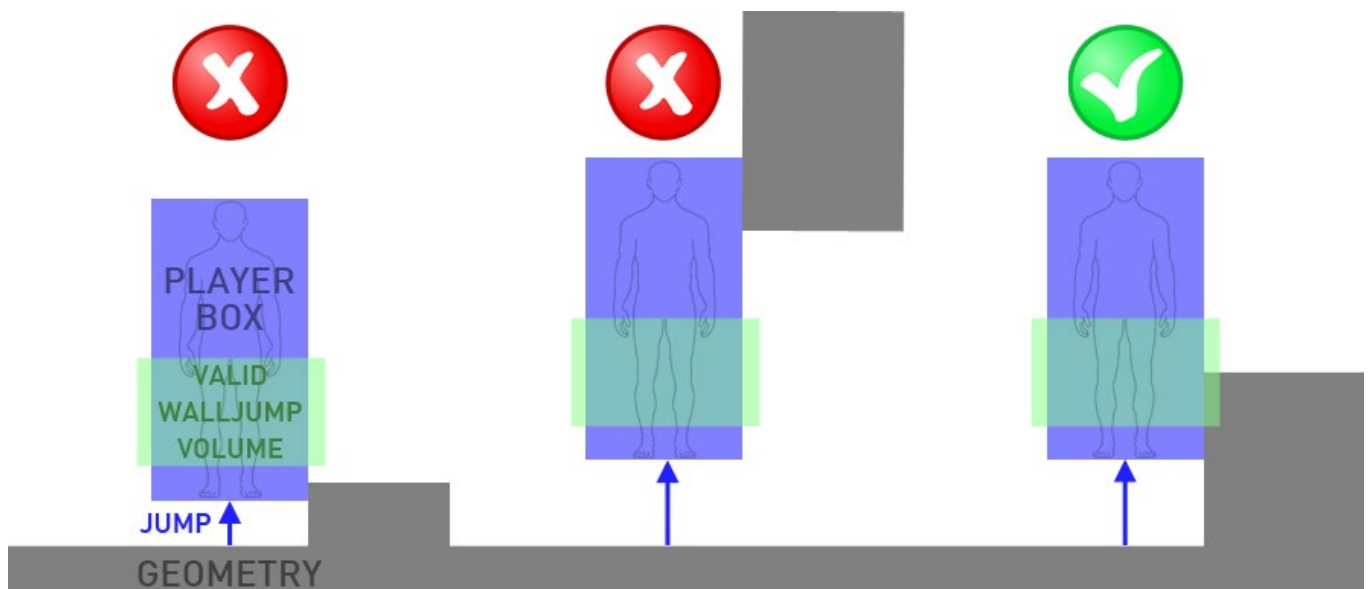
WALL ANGLE

Wall Jumps should only be performed on mostly-vertical surfaces, although there should be a little flexibility for overhangs and much more flexibility for sloped surfaces.
Ideally looking at something that supports:

1. Perfectly vertical (90 degree) walls
2. Slightly overhanging (~95 degree) walls
3. Very steep (~60 to 89 degree) slopes

⚠ To be able to perform a Wall Jump of anything besides a fixed 90 degrees, the Valid Wall Jump Volume would need to be slightly larger than the player collision itself.
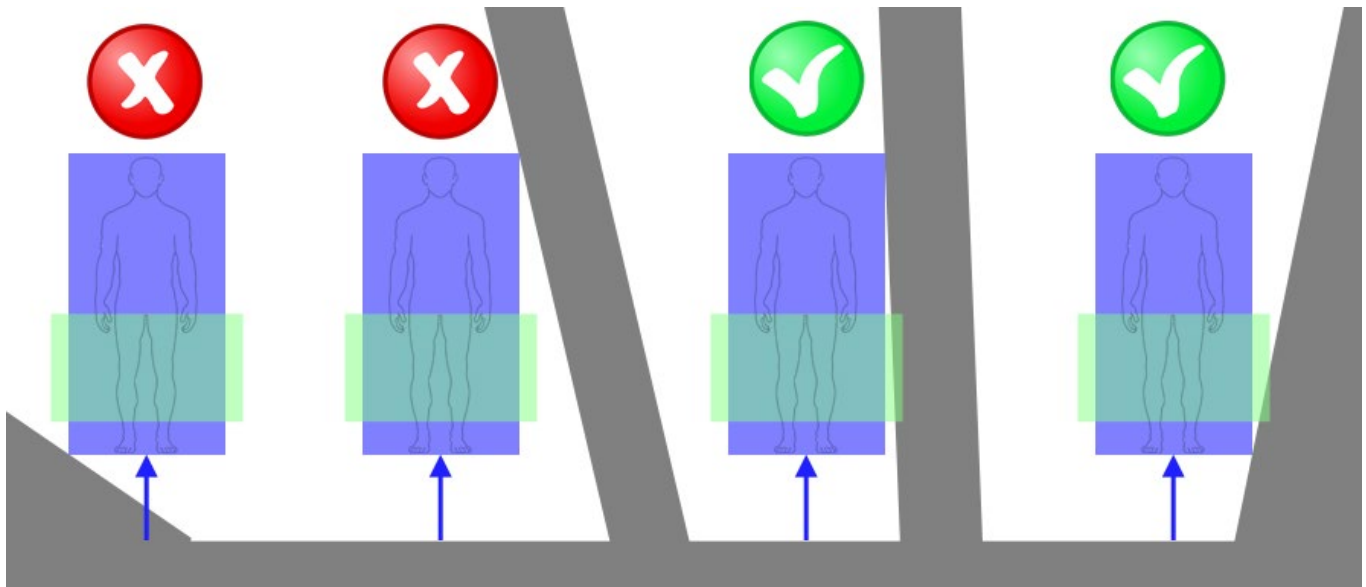
MULTIPLE SURFACES

In cases where the player is in contact with multiple surfaces (*i.e. the player is in a corner*) **choose the wall which has been most recently collided with**.

CONSECUTIVE WALL JUMPS

It is possible for players to chain Wall Jumps off multiple surfaces without hitting the ground.

To prevent them from jumping off the same surface twice in a row, **players can only Wall Jump off surfaces that are at least 90 degrees offset** from the most recent surface they wall-jumped from.

This control is reset when the player lands and/or performs a regular jump from ground level again.

WALL JUMP DECAY

We will need a system to prevent players from infinitely climbing a structure with chained Wall Jumps.
Similar to consecutive jumping decay, **the impulse granted from consecutive Wall Jumps should also decay**.

This control is reset when the player lands and/or performs a regular jump from ground level again, rather than reset after a fixed amount of time like regular jumping decay.

> ❓ This could possibly use the same Jump Decay as regular jumps if we find we need the control to be a bit harsher.

DELAYS

Just to prevent the edge case of rapid-fire/macro'd Wall Jumps in confined spaces, the **existing Jump Delay needs to be taken into account**.

- A Wall Jump cannot be performed after a Jump until the Jump Delay time has passed (default 100ms)

- A consecutive Wall Jump cannot be performed until the Jump Delay time has passed (default 100ms)

- A Jump cannot be performed after a Wall Jump until the Jump Delay time has passed (default 100ms)

- A Jump and Wall Jump cannot be performed at the same time if both checks are valid
  - ⚠ A Jump should be prioritised over a Wall Jump if both can be performed at that time

RECEIVING DAMAGE

VIEW KICK

When players receive damage from any source, we want to provide a 'flinching' feedback that also temporarily disrupts their aim.

This is to give players a sense of urgency, allow players to 'suppress' snipers at range, and give the player who hits first a minor advantage.

In the same way that screen-blood is proportional to health lost, view-kick should also scale with the damage received. This is to give players more feedback on how much damage they have taken, but also prevent low-tap damage from being too disruptive.

To achieve this, we will need several values that we can adjust on the pawns:

- **Minimum View Kick** (in degrees)
    - *How much view kick the player gets when receiving minimal damage (<1%)*
- **Maximum View Kick** (in degrees)
    - *How much view kick the player gets when receiving maximum damage (100+%)*
- **View Kick Recover Time**
    - *How long it takes to recover to zero-degrees. Should take the same regardless of amount*

Some other considerations:

- View Kick should jump up instantly, and recover over time
- View Kick should be additive to the current cross-hair position if a new hit is received before fully recovering
- View Kick is based on health lost in a single frame, so multiple hits will be combined into a single spike
- View Kick is based on a percentage of maximum-health lost, so high HP Mercs will receive less kick
- View Kick amount should scale down relatively when zooming in with iron sights, based on a fixed default/minimum FoV of 65.
    - *So view kick when aiming with a scope with a FoV of 32.5 will kick up by half the degrees, resulting in the same feeling as from the hip*
- View Kick should take effect for the following damage types as so:

Bullet	Melee	Explosive	Laser	Fire	Gas	Fall
✅	✅	✅	✅	❌	❌	❌

QUICK ABILITY BEHAVIOUR

The Quick Ability usage key is the easy-to-use alternative to manually swapping weapon-slots to select and use an item.

FUNCTION

1. **Lower** Original Item
   a. *Only IF another Item is currently selected*
2. **Raise** Ability Item 1
3. **Use** Ability Item 1
4. **Lower** Ability Item 1
   a. *Only IF another Item was originally selected*
5. **Raise** Original Item
   a. *Only IF another Item was originally selected*

Edge Case Interrupts

If the player presses a second Quick Ability Key (*see Fletcher's Sticky Bombs & Detonator*) it should cancel any current/future steps for **Ability Item 1**, and Queue **Ability Item 2** Actions but still return to the **Original Item.**

1st Ability Pressed -then- 2nd Ability Pressed during Step 1 (Lower Original Item)	1st Ability Pressed -then- 2nd Ability Pressed during Step 2 (Raise Ability Item 1)	1st Ability Pressed -then- 2nd Ability Pressed during Step 3 (Use Ability Item 1)	1st Ability Pressed -then- 2nd Ability Pressed during Step 4 (Lower Ability Item 1)	1st Ability Pressed -then- 2nd Ability Pressed during Step 5 (Raise Original Item)
1. **Lower** Original Item 2. **Raise** Ability Item 2 3. **Use** Ability Item 2 4. **Lower** Ability Item 2 5. **Raise** Original Item	1. **Lower** Original Item 2. **Raise** Ability Item 1 3. **Lower** Ability Item 1 4. **Raise** Ability Item 2 5. **Use** Ability Item 2 6. **Lower** Ability Item 2 7. **Raise** Original Item	1. **Lower** Original Item 2. **Raise** Ability Item 3. -CANCEL- ~~Use Ability Item~~ 4. **Lower** Ability Item 5. **Raise** Ability Item 2 6. **Use** Ability Item 2 7. **Lower** Ability Item 2 8. **Raise** Original Item	1. **Lower** Original Item 2. **Raise** Ability Item 3. **Use** Ability Item 4. **Lower** Ability Item 5. **Raise** Ability Item 2 6. **Use** Ability Item 2 7. **Lower** Ability Item 2 8. **Raise** Original Item	1. **Lower** Original Item 2. **Raise** Ability Item 3. **Use** Ability Item 4. **Lower** Ability Item 5. **Raise** Original Item 6. **Lower** Original Item 7. **Raise** Ability Item 2 8. **Use** Ability Item 2 9. **Lower** Ability Item 2 10. **Raise** Original Item

EXPLOSIVE ABILITIES

The following is a list of all explosive abilities in the game:

- Fletcher's **Sticky Bomb**
- Javelin's **Rocket**
- Fragger's **Grenade**
- Nader's **Nade**
- Proxy's **Mine**
- Skyhammer's **Air Strike Marker**

INTERACTION

If an explosive item blows up it should reward the person that has placed, shot or has thrown the item and never switch ownership when another person hits, but doesn't destroy the item.

Usecase 1

A Fletcher throws a Sticky Bomb against a wall. Javelin shoots a Rocket at Fletcher and while the Rocket passes the Sticky Bomb Fletcher blows it up. The rocket gets damaged but not destroyed and kills Fletcher afterwards. The kill is awarded to Javelin and does not get counted as suicide for Fletcher.

Usecase 2

if you destroy an enemy explosive that explosive should deal damage to the owner (and your team mates).

- If that kills the owner, you should be awarded the kill.
- If it kills your team mates the owner should be rewarded the kill.
- If friendly fire is on and kills the owners team mates you should be rewarded the kill.
- If you destroy it and the explosive kills you, the owner should be rewarded the kill.

Damage Matrix - FF OFF

Detonated By	Damages			Kill Rewarded To		
	Owner	Enemy (to owner)	Friendly (to owner)	If Kills Owner	If Kills Enemy (to owner)	If Kills Friendly (to owner)
Owner / Triggered	✓	✓	✗	Owner (Suicide)	Owner	N/A
Enemy Player (to owner)	✓	✓	✗	Enemy Player	Owner	N/A
Friendly Player (to owner)	N/A	N/A	N/A	N/A	N/A	N/A

Damage Matrix - FF ON

Detonated By	Damages			Kill Rewarded To		
	Owner	Enemy Player (to owner)	Friendly Player (to owner)	If Kills Owner	If Kills Enemy (to owner)	If Kills Friendly (to owner)
Owner / Triggered	✓	✓	✓	Owner (Suicide)	Owner	Owner (Team Kill)
Enemy Player (to owner)	✓	✓	✓	Enemy Player	Owner	Enemy Player
Friendly Player (to owner)	✓	✓	✓	Friendly Player (Team Kill)	Owner	Friendly Player (Team Kill)

Pineapple Juggler

An exception to the above points is the case when a player uses the Augment "Pineapple Juggler". If a player hits an explosive with it and kills the owner of the explosive the player that uses Pineapple Juggler should be rewarded the kill.

EXPERIENCE (XP) SYSTEM

OVERVIEW

Player performance in matches directly contributes to account progression and player levelling-up. The XP system should reward individual actions a player takes during a match, which can be recorded and scored in comparison to other players. It should also reward all aspects of play, unlike the traditional KDR, which is entirely focused on rewarding combat skills.

XP can be acquired through combat, game mode (objectives) and support roles – each of which should be balanced in terms of gain, across the board, to reward players who contribute to matches in ways other than combat.

GOALS

- To reward players for their good play during matches.
- To provide players with a long-term progression path, to keep them engaged.
- To give player a tangible outcome to their earnings during a match.
- To reward players for their role played in a match, regardless of Merc picked.

USER STORIES

- As a player, I want to feel rewarded for my efforts during a match.
- As a player, I want some progression to keep me engaged, and give me a long-term goal to aim for.
- As a player, I would like to see that my actions have a tangible outcome and reward.
- As a support player, I want to be rewarded for my role as much as a combat-focused Merc.
- As an objective player, I want to be rewarded for my role as much as a combat-focused Merc.

EXPERIENCE SYSTEM

XP earned in matches is used for scoring the match and for progressing the player's account.

The intention Experience (XP) is to encourage and awarded players for:
1. Completing positive actions
2. Actively participating in the game
3. Performing exceptional or unconventional actions

XP awards follow these rules:
- In some cases, the XP contribution the player earned is awarded at the point the event is completed e.g. share of XP for damage is awarded when the enemy is killed etc
- In some cases, the XP contribution is awarded per tick e.g. share of XP is given per 1% of the EV escort that is completed
- XP messages are written to the HUD in the format "[Label] +[xp value]XP" e.g. "Kill +50XP"
- XP comes in four categories for use when breaking down XP on the scoreboard or awarding MVP statuses at the end of a match. These are:
  - **Game Mode** – For achieving the goals of the mode i.e. Completing/defending Primary and Secondary objectives, winning rounds in Execution mode
  - **Combat** – For killing players and damaging deployables
  - **Support** – For helping the team in other ways
  - **Badge** – For earning badges

EXECUTION MODE

Execution will need some special treatment when it comes to XP awards due to the nature of the game mode, primarily to account for it being round-based with no-respawns.

The goal of this is to give us methods to encourage and reward positive and exciting play, while increasing the XP/Min rate of playing Execution mode so it's like other game modes.

COMBAT XP

The key method for tracking combat XP is for when an enemy player gets killed or finished. Damage dealt is tracked from the moment of the first hit to death.

To prevent players from exploiting healing mechanics to gain massive XP, the amount of XP split between the players should be capped to the health of the victim.

Some examples:

- A player of 100hp can only provide 100xp on death to the relevant players
- If that player is healed during this time and receives a total of 150 damage, the 100xp is split between the attackers based on the relative percentage of damage dealt

- If a player is ever healed back to **full health** the damage tracking resets entirely and damage dealt before the healing is ignored entirely

KILL XP

Labelled as "KILL +[x]XP", where [x] is the overall damage done by the player dealing the killing blow.
- If the killing blow is a headshot, this should be labelled as a "HEADSHOT KILL +[x]XP"
- If this is a kill that also instagibs (*i.e. sniper rifle headshot or high damage explosive kill*) the attacker will also receive an additional "FINISH +[x]XP"

ASSIST XP

Labelled as "ASSIST +[x]XP", where [x] is the overall damage done by the player, and another player has landed the killing blow.

FINISH XP

Labelled as "FINISH +[x]XP", where [x] is the overall damage done (divided by 2) by the player dealing the finishing blow.

⚠️ Overkill, where damage dealt in the killing blow is carried over to incap health, should also count as Finish XP when the victim is finished by the same killer.

FINISH ASSIST XP

Labelled as "FINISH ASSIST +[x]XP", where [x] is the overall damage done (divided by 2) by the player, and another player has landed the finishing blow.

⚠️ Overkill, where damage dealt in the killing blow is carried over to incap health, should also count as Finish Assist XP when the victim is finished by someone else.

LONG DEFENSE BONUS

The long defence bonus is an XP award for the defending team if they prevent the attackers interacting with the primary objective for 60 seconds. It is awarded in these circumstances:

- If the attackers have not repaired a destroyed EV at all in the last minute
- If the attackers have not entered the capture area in the last minute
- If the attackers have not placed a C4 charge in the last minute
- If the attackers have not picked up the documents/carriable objective in the last minute

This bonus is only awarded for primary objectives, not secondaries.

AUGMENTS

OVERVIEW

Augments are additional perks to Loadout Cards, which will contain 3 of them. They are small functional boosts and abilities, which can alter a Merc's playstyle, but shouldn't directly increase their power or damage in any way. Augments come in different groupings, which will suit different Merc's and their unique playstyles.

GOALS

- To allow players to alter their playstyle with a Merc.
- To implement a degree of customisation that players can engage with.
- To allow players to feel more unique in their playstyle, alongside their unique looks.
- To give players a way of progressing and expanding a 'collection'.

USER STORIES

- As a player, I want a way to personalise my playstyle.
- As a player, I want to customise **my** Merc.
- As a player, I would like variety playstyles for each Merc, which will make me more unique.
- As a new player, I want a form of progression to see that I am advancing.

AUGMENTS

Augments are small upgrades that the player can apply to their Mercs via Loadout Cards, allowing them to customise their play experience. They should be pre-defined in a set of 3 on Loadout Cards, so that players do not pick the 'best' augments and run solely with those. This means augments can vary in power scaling and can be balanced accordingly with other more powerful or weaker augments.

AUGMENTS AND LOAD-OUTS

Augments come pre-attached to Loadout Cards in pre-set configurations based on rarity. Players earn augments by acquiring Loadout Cards and then equipping them on their characters.

Augment List

- **Green** = Active
- **Yellow** = First Edition Only

Type	Required Characters	Name	Ability Effected	Effect
Defensive	Proxy, Bushwacker, Fletcher, Turtle	Lock-on		Turrets, Mines and other deployable defenses react **20%** more quickly.
Defensive	Proxy, Bushwacker, Fletcher, Turtle	Steady	Mine, Turret, Sticky Mine, Cover	**21%** increase to deployables health.
Defensive		Tough		Reduces the delay until health regen starts by **66.6%**.
Defensive		Focus		Reduces flinching when hit by **30%**.
Defensive		Unshakeable		Reduces the damage you take from explosives by **15%**.
Defensive		Spares		Increases the maximum number of magazines that can be carried by **1**.
Defensive	Turtle, Guardian	Extender	Shield Generator, Sky Shield	Increases the size of the protected area by **25%.**
Intel		Bomb Squad		Makes enemy deployables, such as Proximity Mines, more visible.
Intel	Vassilli, Aimee	Spotter	Heartbeat Sensor, Third Eye Cam	**20%** increase to the detection radius
Intel	Phantom, Redeye	Undercover	Active Camo, Smoke Grenade	**10%** increase to ability duration
Intel		Untrackable		Turrets, Mines and other deployable defenses react **40%** slower to your presence.
Offensive		Drilled		**20%** reduction to reload time
Offensive	Rhino	Ice Cold	Mini-gun	**40%** increase in time until overheating
Offensive		Chopper		**15%** increase to melee damage
Offensive		Quick Draw		**30%** faster weapon switching
Offensive	Nader	Bigger Blast	Grenade Launcher	**10%** increase to blast radius of AoE weapons.
Offensive	Fragger, Thunder, Arty, Skyhammer, Kira	Explodydendron	Grenade, Conc Grenade, Artillery, Airstrike, Molotov, Orbital Strike	**10%** increase to blast radius of AoE abilities
Offensive	Fragger, Arty, Skyhammer, Stoker, Proxy, Fletcher, Aimee, Nader	Fail Safe		Reduces the effect taken from your own explosives by **30%**.
Offensive	Rhino	Nitros	Mini-gun	**50%** reduction to weapon warmup time
Scout		Flying Pig		Increases Long Jump distance by **10%** and removes falling damage

Scout		Enigma		Reduced duration of being spotted by **80%**
Scout		Quick Eye		**35%** faster movement speed and raise/lower times when Iron Sighting
Scout		Double Time		Allows you to **reload** whilst sprinting
Scout		Springy		Reduces jumping and Long Jump penalties by **35%**
Specialist		Guardian Angel		Receive an **audio warning** whenever a nearby enemy air support is a danger to you and 20% reduced damage from air support abilities.
Specialist		Looter		Killing an enemy Ammo/Health giver will drop a small Ammo/Health Pack.
Specialist		Quick Slash		Increases melee attack speed by **15%**.
Specialist		Ammo Reach	Ammo Station, Smart Ammunition Armour	**15%** increase to size of ammo giving radius.
Specialist	Javelin	Recharge		Reduces cooldown durations of all abilities by **15%**.
Support		Mechanic		Improves any repair tools and disarm rates by **20%**.
Support	Sawbonez, Aura, Phoenix, Sparks	Get Up!	Defibs, Revifle	**30%** increase to health given on revive.
Support	Aura, Phoenix	Healing Reach	Healing Station, Healing Wave	**15%** increase to size of healing radius
Support	Sawbonez, Aura, Phoenix, Sparks	Potent Packs	Health Packs, Healing Station, Healing Wave	Increase the power of healing abilities by **20%**.
Support	Sparks	Quick Charge	Revive Gun	**10%** increase to round charge rate
Support	Sawbonez, Aura, Phoenix, Sparks, Skyhammer, Arty, Stoker, Kira, Guardian	Extra Supplies	Health Packs, Healing Station, Healing Wave, Ammo Packs, Ammo Station, Bionic Pulse	**20%** cooldown reduction to support abilities
Support	Arty, Skyhammer	Extra Ammo	Ammo Packs	Increase the max number of ammo packs by one
Intel		Big Ears		Enemy footsteps and other appropriate noises are **50%** louder to you
Offensive		Cool		Doubles the time it takes Mounted MGs to overheat
Scout		Sneaky		Reduces the amount of sound you generate when running by **50%**
Specialist		Try hard		Gain **10HP** for each death you suffer without getting a kill, up to a maximum of **30HP**
Specialist		Pineapple Juggler		Allows you to melee hit back mid-air grenades and other projectiles

BADGES

OVERVIEW

Badges are rewarded to players for specific actions they take throughout a match. They should reward key moments that a player would find iconic or memorable with the 'badges', which will be logged through the player's profile. This allows the player to track their progress and keep it as a form of 'trophy case'. The badges should make a player feel good about their gameplay and reward them for all aspects of Dirty Bomb, so a player can feel as though they are contributing well, regardless of the role and Merc they have chosen to play.

GOALS

- To show players the areas that they are performing well in.
- To make players feel accomplished for their play throughout a match.
- To give players a way of tracking their progress and see their rewards from their profile.
- To reward players for highlight moments that would be considered memorable or iconic to the player.
- To show players that ALL Mercs are effective at contributing to matches.

USER STORIES

- As a player, I want to see that my good plays are recognised throughout the match.
- As a new player, I would like to see how my efforts are contributing to the match.
- As a player, I want to clearly see when I am performing well.
- As a player, when I do something awesome, I want to be rewarded for it and feel like I have achieved something.
- As a player, I want to see that the role I am playing is impactful to the match and rewarding.
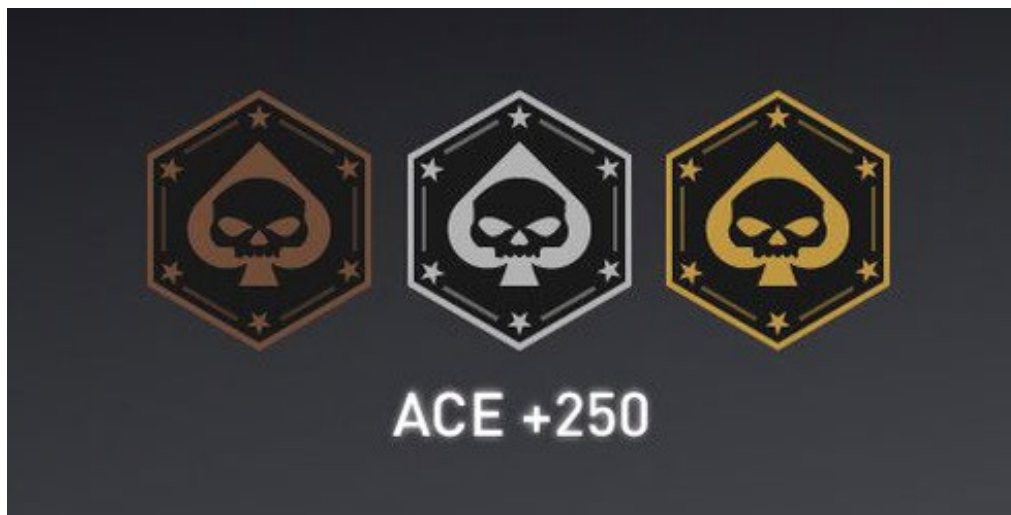
FUNCTIONALITY

Throughout a match of Dirty Bomb, players have the ability to earn 'Badges' based on their gameplay and actions taken throughout the match. These will be rewarded for specific actions and provide a small XP bonus on acquisition.

PRESENTATION

Badges

Each 'Badge' must have its own distinct imagery and icon, which is appropriate to the badge's reward.

The badges will also be tiered, with Bronze, Silver and Gold levels, depending on the badge's difficulty. The higher the tier, the more XP will be rewarded to the player.

- Bronze - 100 XP
- Silver - 250 XP
- Gold - 500 XP

Audio

Specific badges should be supported by audio cue's in the current Merc's voice. These should only be triggered when a badge is displayed but should provide additional feedback for the player. As they would be considered a "taunt", the voice line should be global so that all other players can hear the player's achievement/taunt.

Example: A triple-kill should reward "I killed three of you, and I'm still standing!"

Front End

A key feature of Badges is that they can be tracked by players through their own user profiles, so they can see how many times they have scored achievements such as Triple Kill's, Unstoppables', Killing Spree's, etc. Dirty Bomb's features should reflect its competitive nature, and part of that is being "the best" – the Badges give players 'bragging rights' to their friends, clan-mates and enemies by counting their totals.

Badges should be displayed in the player's profile, in chronological order of their tiers. This will allow players to see their achievements in lowest-to-highest order, insinuating a build-up in quality and 'worth' of the badges. These will be recorded over the **full lifetime** of the player's account, with no resets or breaks in tracking.

In-Game

When a player is in a match and is awarded a badge, it must be made apparent that they have done so, without majorly interrupting the flow of gameplay.

A visual indicator on the HUD will **always** be shown to the player.
(***Exception:*** *Sometimes a global audio cue can also be played alongside the badge's visual indicator.*)

- Badge icon displayed.
- Badge title displayed.
- XP award recorded in XP-gain field.
- **Dependant:** An audio cue supporting the badge's reward will play in the Merc's voice.

The badge HUD display should last for **no longer** than 2 seconds, so that it doesn't block the screen for too long and interrupt the gameplay or other HUD visuals.

LIST OF BADGES

Combat Badges

Badge Title	Icon	Description	Bronze +150XP	Silver +250XP	Gold +500XP	XP Type
Triple Kill		Kill 3 players inside 15 seconds during the same life	X			Combat
Quad Kill		Kill 4 players inside 15 seconds during the same life		X		Combat
Ace		Kill 5 players inside 15 seconds during the same life			X	Combat
Killing Spree		Get 6 kills without dying	X			Combat

Rampage		Get 8 kills without dying		X		Combat
Unstoppable		Get 10 kills without dying			X	Combat
Godlike		Get 15 kills without dying			X	Combat
Finish Him		Finish a player off with a melee strike to the front	X			Combat
Mid Air		Kill a player whilst they are at least 90 units off the ground		X		Combat
First Blood		Get the first kill of the match		X		Combat
Recovery		Kill an enemy after having died 4 times without a kill		X		Combat
Dominating		Kill the same enemy 5 times without being killed by them		X		Combat
Revenge		Kill your dominating nemesis		X		Combat

Kill Spree Ended		Kill a player who's on a Killing Spree	X			Combat
Rampage Ended		Kill a player who's on a Rampage Spree		X		Combat
Unstoppable Ended		Kill a player who's on an Unstoppable spree			X	Combat
Godlike Ended		Kill a player who's on a Godlike spree			X	Combat
Executioner		Get the final kill of a winning Execution match (not rounds)			X	Combat
Full House		Deal Damage to all opponents in one Execution round		X		Combat

Ability Badges

Badge Title	Icon	Description	Bronze +150XP	Silver +250XP	Gold +500XP	XP Type
Revive Spree		Revive 3 players inside 15 seconds during the same life	X			Support
Mircale Worker		Revive 4 players inside 15 seconds during the same life		X		Support
The Doctor		Revive 5 players inside 15 seconds during the same life			X	Support
Blast Master		Kill 3 players with a single AoE blast	X			Combat
Boom		Kill 4 players with a single AoE blast		X		Combat
Explodydendron		Kill 5 players with a single AoE blast			X	Combat
Target Acquired		Kill 2 enemies that are Spotted by you or your team inside 15 seconds during the same life	X			Combat
Huntsman		Kill 3 enemies that are Spotted by you or your team inside 15 seconds during the same life		X		Combat

Paramedic		Provide 150hp Healing to teammates inside 15 seconds during the same life	X			Support
Healing Hands		Provide 300hp Healing to teammates inside 15 seconds during the same life		X		Support
Medicine Man		Provide 450hp Healing to teammates inside 15 seconds during the same life			X	Support
Ammo Cache		Provide 8 Magazines of Ammo to teammates inside 15 seconds during the same life	X			Support
Stockpile		Provide 14 Magazines of Ammo to teammates inside 15 seconds during the same life		X		Support
Armory		Provide 20 Magazines of Ammo to teammates inside 15 seconds during the same life			X	Support

Map Badges

Badge Title	Icon	Description	Bronze +150XP	Silver +250XP	Gold +500XP	XP Type
Road Rage		Kill 4 players with the EV MG in '15 seconds during the same life'		X		Combat
Gunner		Kill 4 players with an MG nest in '15 seconds during the same life'		X		Combat
Spec Ops		Complete 100% of a construct/repair objective by yourself, in a single life	X			Objective
Mission Possible		Disarm a C4 that is 7 or fewer seconds away from blowing up	X			Objective
Gauntlet		Deliver a data core that you picked up at its spawn without dropping it		X		Objective
Can't Touch This		Deliver two Carryable Objectives in the same match		X		Objective
Demolition Expert		Destroy two Objectives (Primary or Secondary) with C4 in the same match		X		Objective
Rain Of Fire		Disable the EV by dealing more than 50% damage inside 15 seconds during the same life'		X		Objective

Badge Title	Icon	Description	Bronze +150XP	Silver +250XP	Gold +500XP	XP Type
Shut Down		Kill an enemy as they are defusing a C4 charge	X			Objective
Cutting It Fine		Kill an enemy as they are delivering the Objective or Planting a Bomb	X			Objective
Honor Guard		Continually escort the EV for 15 seconds during the same life'	X			Objective
Perfect Round		Win an Execution Round with no deaths on your team	X			Objective
Last One Standing		Survive a winning Execution round as the only one still alive	X			Objective

Totals

Badge Title	Icon	Description	Bronze +150XP	Silver +250XP	Gold +500XP	XP Type
Kills 1		Kill 15 players in a match (or single round of Stopwatch)	X			Combat
Kills 2		Kill 25 players in a match (or single round of Stopwatch)		X		Combat
Kills 3		Kill 50 players in a match (or single round of Stopwatch)			X	Combat

Assists 1		Get 10 assists in a match (or single round of Stopwatch)	X			Combat
Assists 2		Get 20 assists in a match (or single round of Stopwatch)		X		Combat
Assists 3		Get 30 assists in a match (or single round of Stopwatch)			X	Combat
Melee Kills 1		Get 5 melee kills in a match (or single round of Stopwatch)	X			Combat
Melee Kills 2		Get 10 melee kills in a match (or single round of Stopwatch)		X		Combat
Melee Kills 3		Get 20 melee kills in a match (or single round of Stopwatch)			X	Combat
Revives 1		Revive 5 teammates during a match (or single round of Stopwatch)	X			Support
Revives 2		Revive 10 teammates during a match (or single round of Stopwatch)		X		Support
Revives 3		Revive 20 teammates during a match (or single round of Stopwatch)			X	Support

Healing 1		Provide 1,500hp Healing to teammates during a match (or single round of Stopwatch)	X			Support
Healing 2		Provide 2,500hp Healing to teammates during a match (or single round of Stopwatch)		X		Support
Healing 3		Provide 5,000hp Healing to teammates during a match (or single round of Stopwatch)			X	Support
Ammo 1		Provide 40 Magazines of Ammo to teammates during a match (or single round of Stopwatch)	X			Support
Ammo 2		Provide 60 Magazines of Ammo to teammates during a match (or single round of Stopwatch)		X		Support
Ammo 3		Provide 80 Magazines of Ammo to teammates during a match (or single round of Stopwatch)			X	Support
Objectives 1		Complete 1 Primary Objective during a match (or single round of Stopwatch)	X			Objective
Objectives 2		Complete 2 Primary Objectives during a match (or single round of Stopwatch)		X		Objective
Objectives 3		Complete 3 Primary Objectives during a match (or single round of Stopwatch)			X	Objective

GAME MODES

OVERVIEW

Dirty Bomb's game modes provide the rule-sets and competitive challenges that facilitate the game's core pillars. They should balance the need for fair competition with accessibility and offer players degrees of mastery within the rules of the mode itself. The game modes should also highly encourage teamwork and the characteristics of our Mercs, while still allowing room for individual heroics.

GOALS

- Dirty Bomb's game modes should reflect Splash Damage's mission, values and our roots
- Dirty Bomb's game modes should encourage players to play together in ways that are both complimentary and directly competitive
- Dirty Bomb's game modes should provide a variety of mastery goals to suit the different player personality types, focusing on our key target markets
- Dirty Bomb's game modes should provide players with a modern take on the classic ET formula
- Dirty Bomb should have game modes that have narrative grounding, exciting events and evolving or different spaces
- Dirty Bomb should have game modes that feature objectives that foster teamwork
- Dirty Bomb's game modes should enable a high tactical skill ceiling that encourages both individual mastery and cooperative mastery
- Dirty Bomb's game modes should be easy to understand for a first-time player but be different from other shooters and offer more depth than meets the eye

USER STORIES

- As a player, I think that Dirty Bomb has the coolest game modes in any game ever!
- As a player, I love that Dirty Bomb has game modes that feel different to what is available in other shooters
- As a player, I like that Dirty Bomb has a variety of things that I can target to do in the various game modes, which keeps things from feeling stale
- As a player, I love that there is a bit of variety in Dirty Bomb's game modes, so I can change up the pace without taking a break from the game completely

STOPWATCH

OVERVIEW

The goal is to complete all of the primary objectives as quickly as possible (at which point the round ends) and prevent the other team from completing them in a quicker time. If the match time expires for both teams, the team that has made more progress on primary objectives wins.

The map and mode is intended to make draws unlikely, but they are possible.

TEAM SIZES

Ranked Stopwatch matches are always 5v5, casual matches can vary in size up to 8v8.

MATCH TIME

The maximum time allowed for each attack/defence cycle is 15 minutes (*any Overtime from the first round may be added to this in second round*)

SPAWN TIMER RULES

Stopwatch should have both teams on a fixed spawn wave of **25s**

Players who are 'gibbed' and have no chance of reviving should also be automatically respawned when the timer hits zero, rather than waiting for the player to press 'JUMP'. They should still have to wait the minimum 2.5s reserved for 'death ghost viewing'.

Time Display

For the first round, the timer ticks downwards to 0:00 from 15:00 (*any Overtime from the first round may be added to this in second round*)

For the second round, the timer ticks downwards from the first round's completion time.

Overtime

Overtime is possible on the **first round** of a Stopwatch match. If a primary objective is in progress when the timer ends, the match does not end until the objective is finished, or the objective progress stops.

In these cases, the time added for overtime is added to the round time for the opposition team when they are attacking.

WINS, DRAWS & LOSSES

Progress for Stopwatch Mode is only measured against Primary Objectives. Per individual primary objective type.

The **WINNER** of the Stopwatch match is decided in the following order:

1. **Which team completed the entire map the fastest** (*if neither completed the map, go to step 2*)
2. **At the end of both rounds, which team completed the most primary objectives** (*if the same number of primary objectives were completed, go to step 3*)
3. **At the end of both rounds, which team progressed the furthest on the most recent primary objective** (*if progress was the same for both teams on that objective, go to next step*)
    a. If this is a C4 objective, the fuse/arming/disarming a charge <u>is not taken into account</u> since it can be reversed. <u>Only multi-stage objectives are counted</u> towards Win progression (*Double C4 plant at end of Terminal*)
    b. If this is a Carry objective, Carryable pick-up/distance <u>is not taken into account</u> since it can be reversed. <u>Only multi-stage objectives are counted</u> towards Win progression (*Double delivery at end of Chapel*)
    c. If it is an Escort objective, an escort IFF is drawn on the ground to represent the spot where the team attacking second needs to progress the EV to in order to win the match.
4. The match is a **DRAW**

If the team attacking in Round 2 reaches any of the WIN requirements (*progresses further on current objective, completes more objectives or completes the map*) then they instantly WIN the game.

OBJECTIVE PROGRESS

This table shows how we measure progress on a per objective state, relevant to Step 3 outlined above.

Objective Type	Progress Measurement (if not fully completed)
Carry	No %age state; either the Carryable is delivered or it isn't - For multiple Carries the number that is completed will count
Destroy (C4)	No %age state; either the C4 goes off, or it doesn't - For multiple C4s the number that is completed will count
Escort	Highest %age of Escort completed (distance travelled)

MATCH FLOW

| Attack/ Defend Intro | 5 Second Countdown Character Select | Attack!/Defend! | Outro | Intermission | Attack/ Defend Intro | 5 Second Countdown Character Select | Defend!/Attack! | Outro | End of Match Review | Personal XP Tally |

USER INTERFACE

It is important that both teams in Round 2 are fully aware of how far the attackers have to go to win the game.
This will be achieved by:

1. Having the timer tick-down from the total time-available
2. Having the Objective UI updated to highlight the end-goal
   a. Number of objectives required to complete
   b. How far they need to progress along a particular objective to win (*where relevant*)

SECONDARY OBJECTIVES

Secondary objectives are disabled as a map progresses. This follows these rules:

- Upon a primary objective getting completed, the secondaries in that section are automatically set to the state that favours the attackers
  o This only happens if the area with the secondary is no longer active gameplay space (for example, the ramp in Chapel would not disable until the EV has reached the lift)
- Any existing repair progress, damage state, or C4 plant is ignored
  o Planted C4 charges disappear
- No notification is broadcast to players other than the primary objective notification

EXECUTION

OVERVIEW

In Execution Mode, each team is trying to win the most out of 12 rounds. To win a round the attacking team needs to eliminate all enemy players or bomb one of the objectives; the defenders must stop them.

WIN CONDITIONS

A round is won if:

- **Attackers**
    - The attackers kill all the defenders
    - The attackers destroy one of the two objectives (Pylons)
- **Defenders**
    - The defenders kill all the attackers and no C4 is currently active
    - The defenders defuse a planted C4 before it goes off
    - The round time expires

If either team wins 7 rounds, they are declared the victor for the match, and it ends even if all 12 rounds have not been played. If each team wins 6 rounds, it is declared a Draw. Individual rounds cannot end in a draw. If the last players simultaneously kill each other, a check is done to see if a bomb is planted. If there is an active bomb, the attackers win, and if not, the defenders win.

The last player on a team does not normally need to be finished for the opposition to win the round, as there is no teammate available to revive them. The exceptions to this are Nader and Phoenix, as they have abilities that can be used from incapped. If the last player on the attacking or defending team is Phoenix, he needs to be finished for the round to complete via team elimination. If the last player on the attacking team is Nader, she does not need to be finished for the round to end, but she *does* if she's the last defender and the C4 plant is not down. The round would end either when Nader is finished or the C4 is planted.

RULES

The attacking team has one C4 charge which can be dropped and picked up.

- In the first round, it is spawned on the highest account level attackers when the round starts but ALWAYS on the highest level 'Engineer' if they have one or more.
- In subsequent rounds, it should be spawned on the Engineer with the highest XP in the current match (*or the player with the highest XP if no Engineers are on the team*)

Since players can switch Mercs during the short 'warmup' period before each round, the bomb must be re-allocated if the priorities change.

When a player picks up, or is spawned with the bomb, the carrier will:

1. Have it occupy slot 6 in their inventory (some Mercs will have 5 empty, but it should always be on 6)
2. Have an icon added to the HUD while they have the bomb in their inventory
3. Have text pop up briefly saying "You have Picked Up the Bomb"
4. Be able to switch to the Bomb in their inventory (key 6)
5. Be able to drop the bomb with Primary or Alternate fire
6. Be the only player to receive the [F] Content Prompt to plant when in range of the Bomb sites

When the bomb is being carried, Attackers will:

1. Be notified the [Player X] has picked up the Bomb
   ⚠ *Defenders should NEVER be notified when an Attacker picks up the bomb*
   ⚠ *Attackers should not be notified when someone else is automatically assigned the bomb at the start of the round*
2. See the bomb carrier highlighted on the minimap
3. See the bomb carrier's team-mate IFF highlighted as having the bomb

When the bomb is being carried, Defenders will:

- See the bomb carrier's crosshair-info-IFF highlighted as having the bomb

When the Bomb is dropped on the ground, Attackers will:

1. The player who dropped should have a text pop up briefly saying "You have Dropped the Bomb"
2. Be notified the [Player X] has dropped the Bomb
3. Have it visible in world (through geometry) with a HUD element
4. Have is visible on the minimap with an icon that is distinct from a player carrying it
5. Be able to run up to the Bomb and receive a context prompt to pick it up using [F]

When the Bomb is dropped on the ground, Defenders will:

1. Have it visible in world with a HUD element BUT ONLY when it's in line of sight
2. Have is visible on the minimap with an icon that is distinct from a player carrying it BUT ONLY when it's in line of sight

MATCH TIME & RULES

There is no concept of overall match time, but each round has a time limit of 2:00. If the time limit expires for a round, the defending team wins the round. The round goes into overtime if there is an active C4 charge.
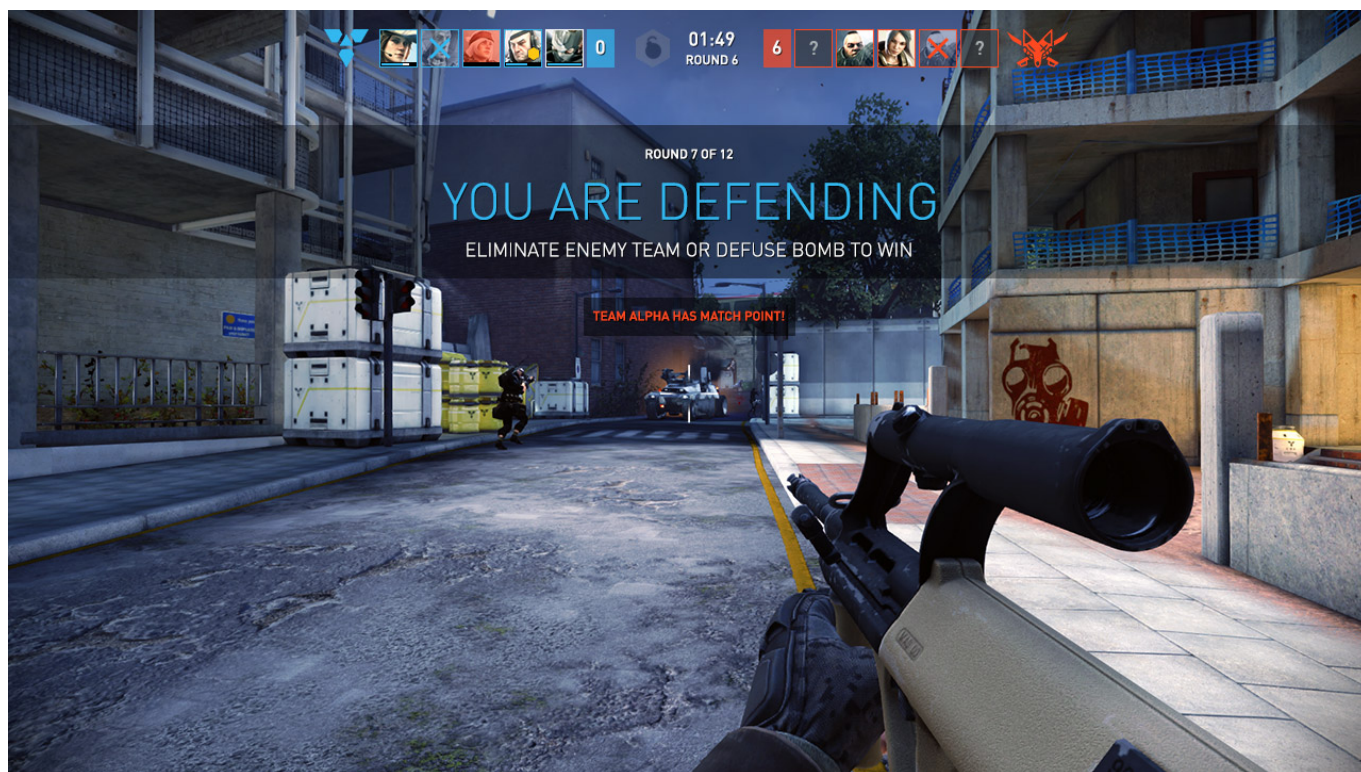
HALF TIME

At the midway point of the overall rounds (in between round 6 and 7 for 12 overall), the teams switch spawn areas. The Intro plays again but shows the team in their new spawn.
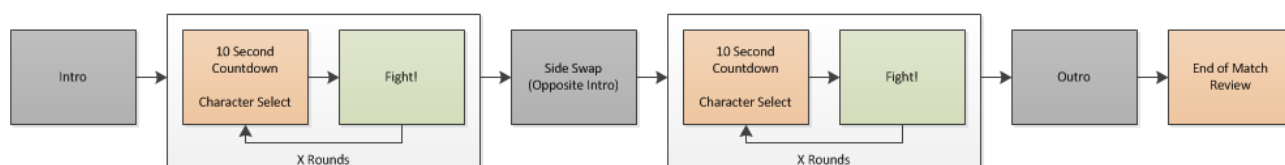
MATCH POINT

When one team has won 6 rounds and only requires one more round to win the match, at the start of the round both teams should be told it is 'Match Point'

⚠ *Exact treatment and strings are always subject to change between concept and implementation*

MATCH FLOW

INTRO

Intros are unique to each team and show a quick view of the spawn area and then frame the team. The focus of this is on the Mercs, rather than the spawn area itself. Camera matinee should be a slightly rotating pan from right to left.

MIDTRO

After half time the teams get a different version of their intro in their new spawns, but this time the camera matinee should be a slowly rotating pan *from left to right*.

OUTRO

Shows the winning team looking super cool; respawns the team in their current spawn location and shows them off with a different camera. Spawn weights should also go through XP scored, so that higher scoring players are at the front.

Fades should be used for going in and out of all cinematic transitions.

COMMANDER VO TEMPLATE

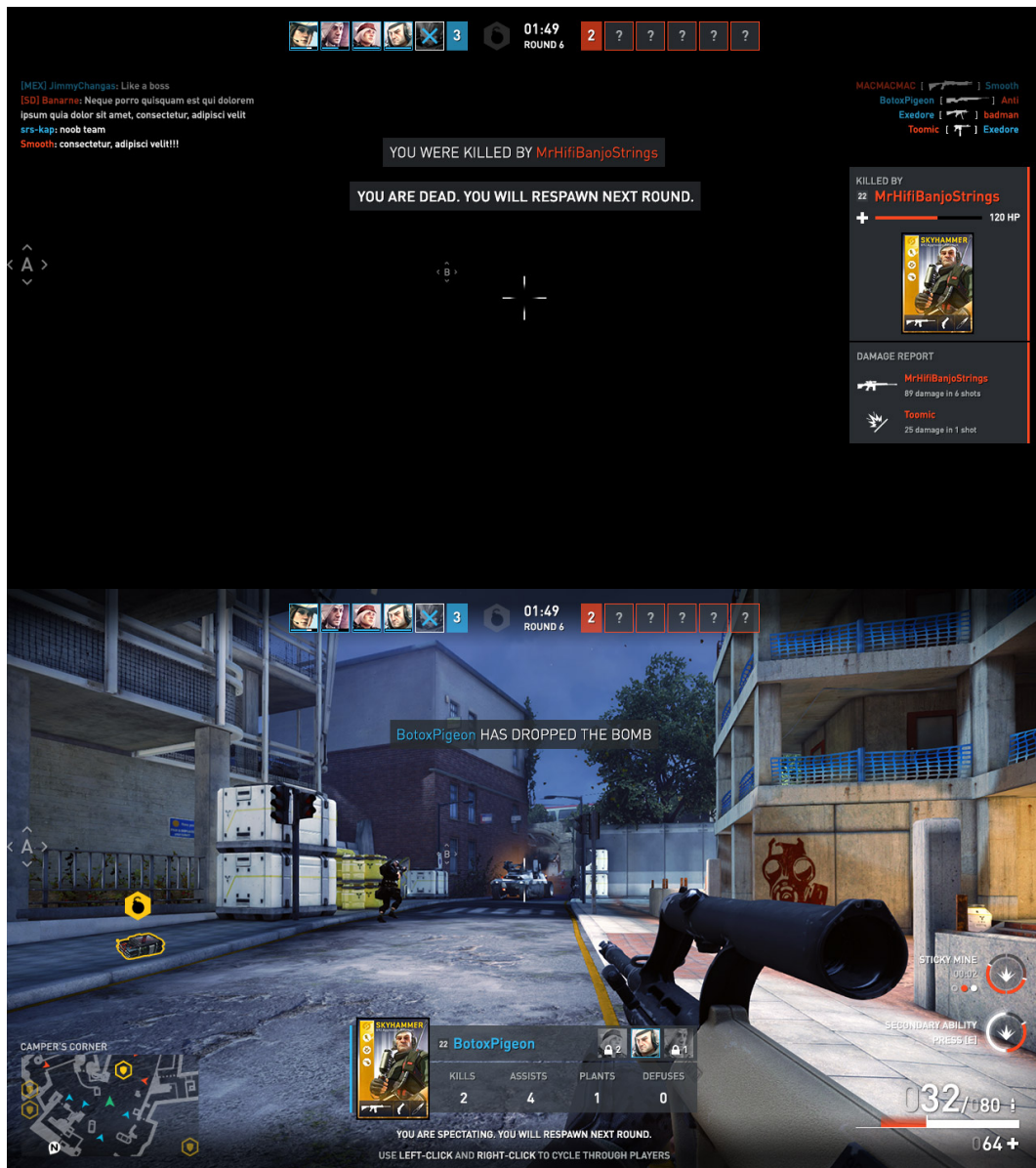| Mode State	Commander A	Commander B	Wwise Event Name
Intro	Execution. Eliminate the enemy or destroy one of the Pylons.	Execution. Eliminate the enemy and defend the Pylons.	Commander_Spawn_Brief_01
C4 Planted Site A	C4 planted at site A, defend it!	They planted C4 at site A, defuse it!	Commander_C4_Planted
C4 Planted Site B	C4 planted at site B, defend it!	They planted C4 at site B, defuse it!	Commander_C4_Planted
First Blood (only triggers for team that gets it)	First Blood.	First Blood.	Commander_First_Blood
One Player Left A	Only one team member left.	Only one enemy remaining.	Commander_1_Enemy_Left
One Player Left B	Only one enemy remaining.	Only one team member left.	Commander_1_Teammate_Left
Round Won Elimination A	All enemies eliminated. Round won.	All team members eliminated. Round lost.	Commander_Enemy_Kill_Victory
Round Won Elimination B	All team members eliminated. Round lost.	All enemies eliminated. Round won.	Commander_Team_Kill_Victory
Round Won Destroy A	Pylon Destroyed. Round won.	Objective Destroyed. Round lost.	Commander_C4_Detonated
Round Won Destroy A	We're out of time! Round lost.	Objective Destroyed. Round won.	Commander_C4_Detonated
Round Won Defuse B	C4 defused. Round lost.	C4 defused. Round won.	Commander_C4_Defused
Round Won Defuse B	C4 defused. Round won.	C4 defused. Round lost.	Commander_C4_Defused
Round Won Timeout A	Time has run out. Round lost.	Time has run out. Round won.	Commander_Time_Up_Defeat
Round Won Timeout B	Time has run out. Round won.	Time has run out. Round lost.	Commander_Time_Up_Victory
Outro Win A	Excellent work.	Better luck next time.	Commander_Match_Lost
Outro Win B	Better luck next time.	Excellent work.	Commander_Match_Won

The objective HUD in the top left of the screen needs to be specific to Execution mode and different from Stopwatch and Objective. It should clearly show:

HUD

- The round timer
- The round number
- The number of players alive on each team
- The number of rounds won by each team
- If the bomb has been planted
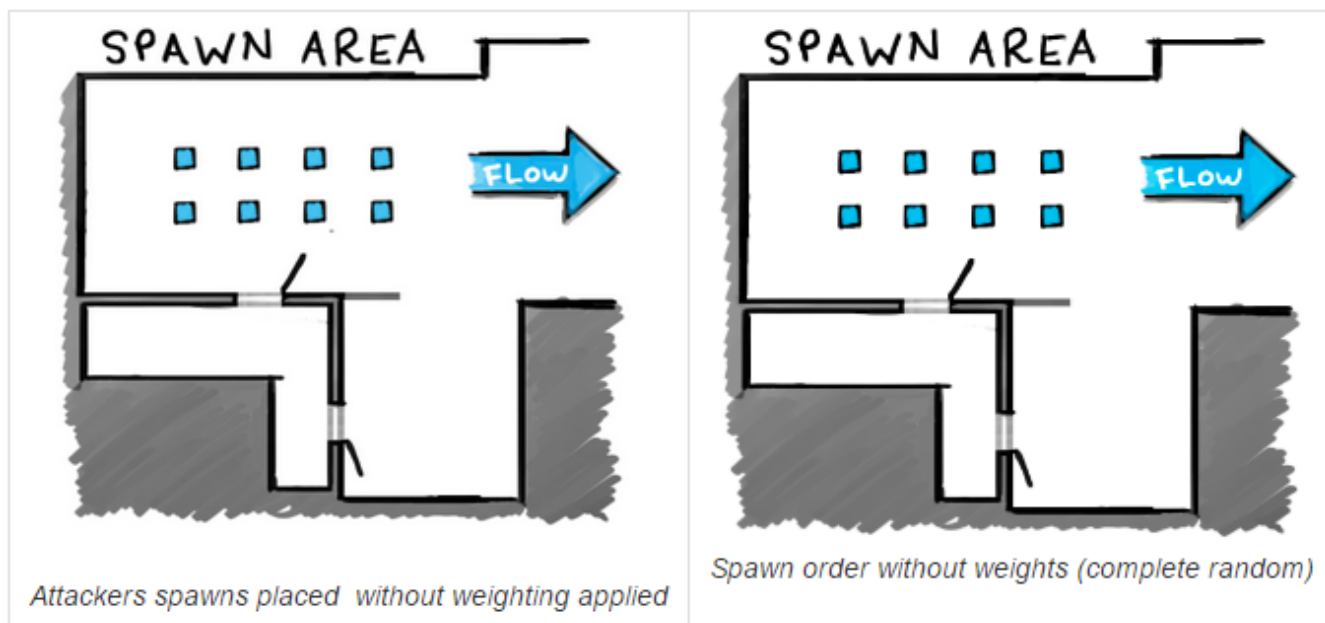- The bomb's fuse progress

01:49
ROUND 6

2 ? ? ? ? ?

[MEX] JimmyChangas: Like a boss
[SD] Banarne: Neque porro quisquam est qui dolorem ipsum quia dolor sit amet, consectetur, adipisci velit
srs-kap: noob team
Smooth: consectetur, adipisci velit!!!

MACMACMAC [   ] 5mooth
BotoxPigeon [   ] Anti
Exedore [   ] badman
Toomic [   ] Exedore

YOU WERE KILLED BY MrHifiBanjoStrings

YOU ARE DEAD. YOU WILL RESPAWN NEXT ROUND.

KILLED BY
22 MrHifiBanjoStrings
120 HP

SKYHAMMER

DAMAGE REPORT

MrHifiBanjoStrings
89 damage in 6 shots

Toomic
25 damage in 1 shot

01:49
ROUND 6

2 ? ? ? ? ?

BotoxPigeon HAS DROPPED THE BOMB

CAMPER'S CORNER

STICKY MINE
00:02

SECONDARY ABILITY
PRESS [E]

SKYHAMMER

22 BotoxPigeon

KILLS	ASSISTS	PLANTS	DEFUSES
2	4	1	0

032/80
064+

YOU ARE SPECTATING. YOU WILL RESPAWN NEXT ROUND.
USE LEFT-CLICK AND RIGHT-CLICK TO CYCLE THROUGH PLAYERS

SPAWN SYSTEMS

SPAWNS

Spawns are created in a typical fashion. 8 spawns for each team per objective is the desired amount.

Team indexes must be applied. **0 are the attackers** and **1 are the defenders**.

Attackers spawns placed without weighting applied

Spawn order without weights (complete random)

Spawn weights give priority over which spawn point to use over others.

WEIGHTING

Players spawning will always **spawn on the lowest weight first**.

When there are **multiple spawns** with the **same weight**, one of them **are chosen at random**.

Weights should go from **0 - 100** (**0** being the **highest priority** a **100** being the **lowest priority**.)

Weighting applied	Spawning with Weights
(with priority to those closest to flow/objective)	(Spawns are random on similar weights)
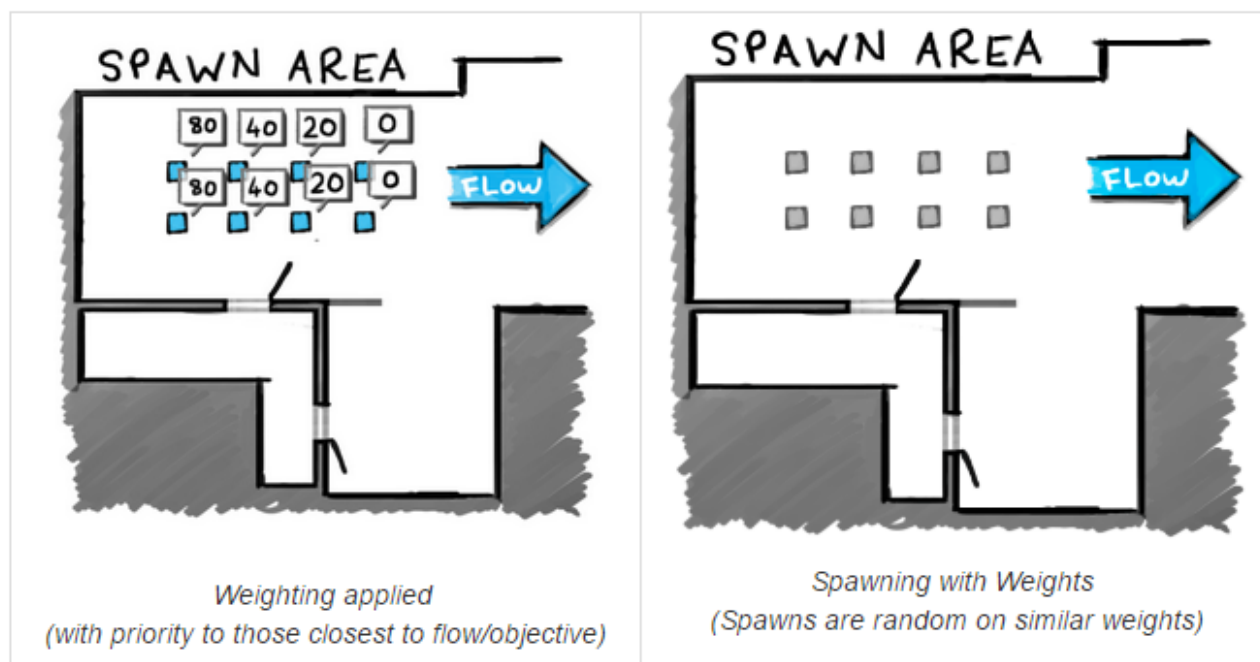
UPDATE: ⚠️ When multiple players are spawning in the same wave, the slower Mercs (*m_Archetype.ground_speed*) should be given the higher-priority spawns, **with the slowest Mercs spawning at the front.**

SPAWN WAVES + MINIMUM SPAWN TIMES

Spawns lie on an **internal 25s timer** wave. This starts when the round does. and continues doing these 25 second periods until the end of the game.

Players dying and waiting to spawn will respawn on the next wave using this internal timer.

WHY?
- So, all dead players spawn together
- Encourage teamwork
- Stop single drip feed spawns which clash heavily with objective play.
- Minimum times will force players to break and recollect themselves.
- Avoiding extremely short spawn times; which can become stressful and confusing.

OBJECTIVE MODE SPAWN SYSTEMS

Spawn Time Scaler

This system is used to both balance out the intensity of small and large games and also help when team sizes are imbalanced.

Server Size

A Spawn Time **Scaler** is applied at all to both teams, with a base default time of **20s**.

Each **player increases** the spawn Scaler by **x0.1875**

> **Resultant Spawn Time** = **Default Map Spawn Time** x **Scaler**

Higher player counts will increase spawn times (e.g. **8v8** being **x1.5** making spawn times hit **30s**)

Lower player counts decreases spawn times (e.g. **3v3** being **x0.5625** making spawn times hit **11.25s**)

Scalar in action according to server size
(Even teams)
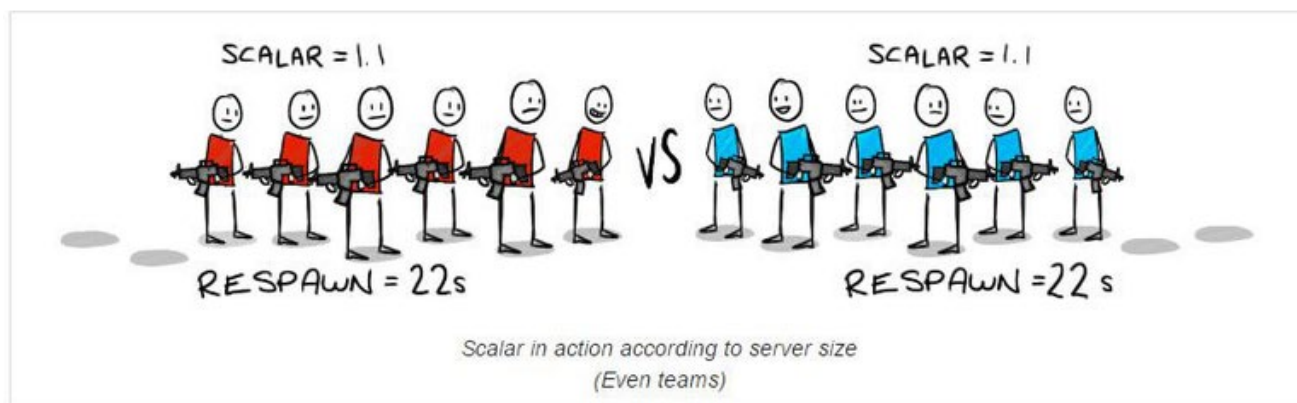
There is a Scaler function for each team, this should be the same if teams are balanced.

Unbalanced Teams

When teams are **imbalanced** there will be **less players on one team**, and therefore the **Scaler** for that team will **reduce** and makes the **team spawn faster**.

This becomes a **subtle** and natural feeling **balance** mechanic.

e.g. **6v5** means **0.9375x** for the team of **6**, and a **x0.9375** Scaler for the **5**-man team. (usually ending up with a **22.5s vs 18.75s** spawn time - seems reasonable)

The Scalar automatically balancing teams
(Uneven/Asymmetrical teams)
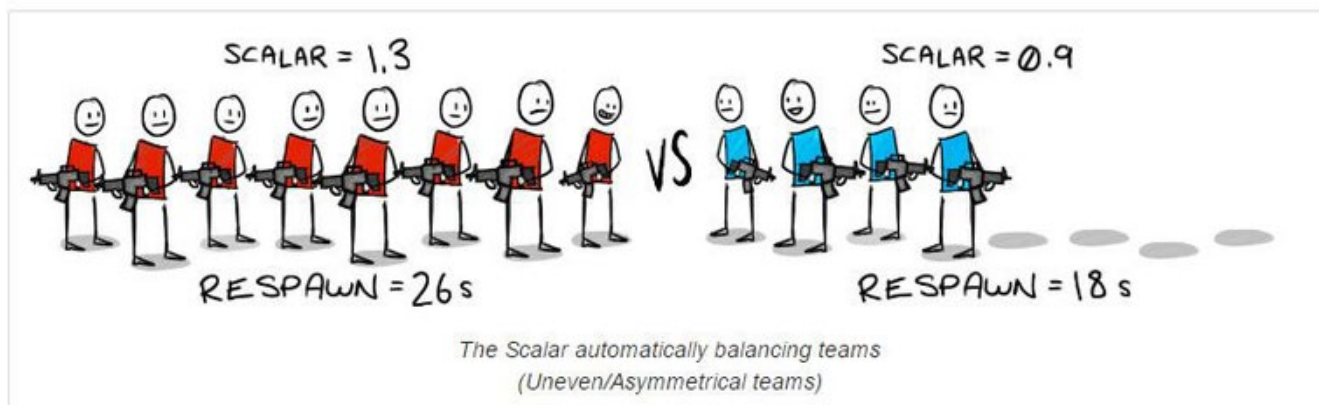
Each team uses the same **base** table, but each player only affects their **own team**.

Scaler Table

Player Amount (Per Team)	Base Time (Seconds)	Scaler (Multiplier)	Resultant Spawn Time (Seconds)
0		0	0
1		0.1875	3.75
2		0.375	7.5
3		0.5625	11.25
4	20	0.75	15
5		0.9375	18.75
6		1.125	22.5
7		1.3125	26.25
8		1.5	30

WHY?
- We do this to keep teams balanced and the amount of overall server action feeling comfortable for the amount of players. If there are too many, then they are spawned less to cause less spam. If there are more they are spawned more often to make it feel less sparse.
- Players will feel more comfortable on emptier servers.
- Players will feel like there is not as much spam on larger servers.
- Imbalanced teams, especially in 'unsolvable' asymmetrical team cases (eg. 6 v 5 -> 22.5s v 18.75s) it still helps to subtly balance.

SPAWN TIME RUBBER BANDING

An easy method to improve the flow and pacing of all the levels in Objective mode will be to scale the attackers spawn time based on the time left on the clock.

This works very well for cumulative timers in Objective mode:

If defenders hold an objective for a long period, attackers start spawning progressively faster until the objective is completed, and more time is added to the clock
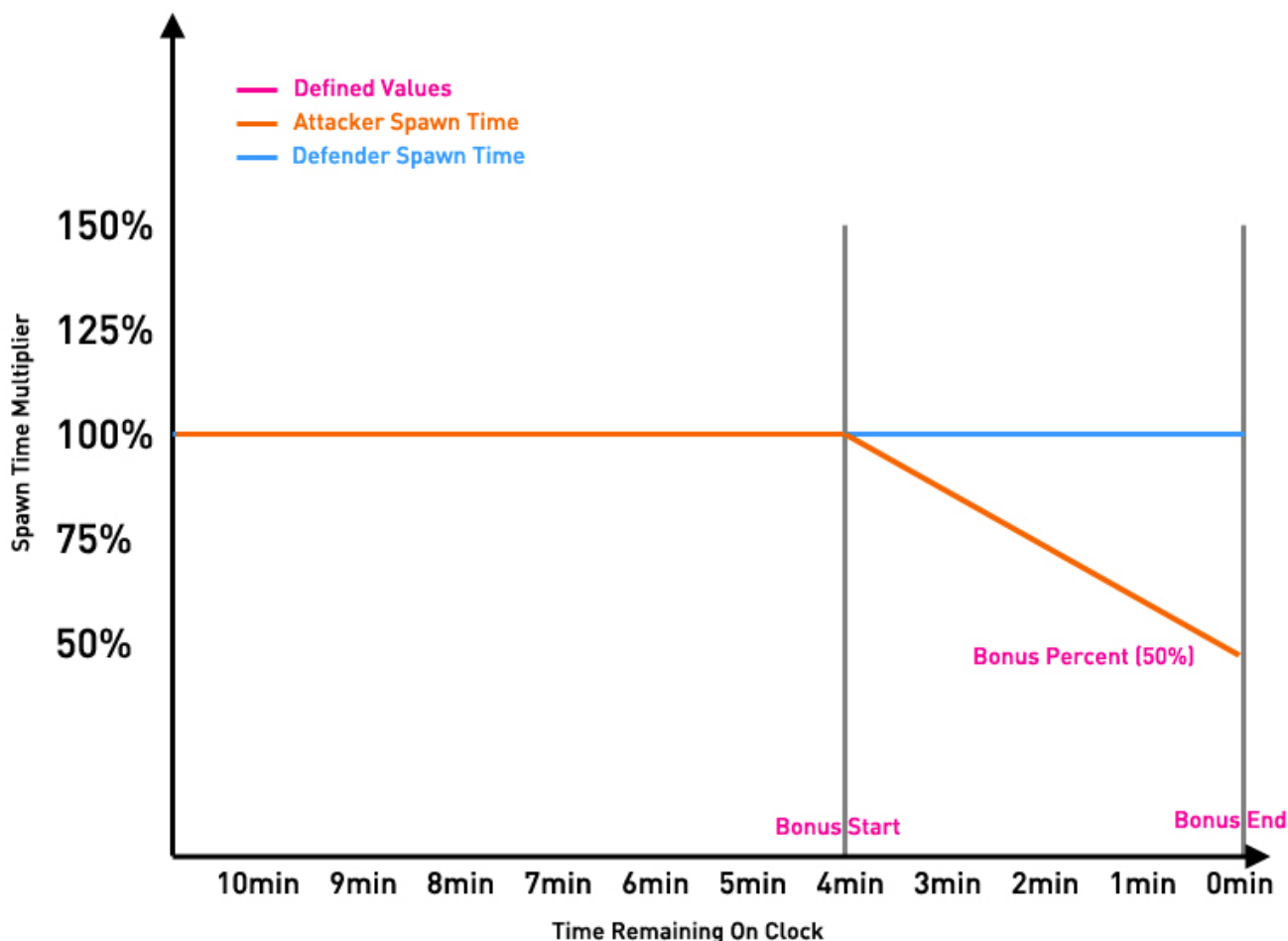
DEFENDER 'FALL BACK' RESPAWNS

After every Primary Objective is completed, Defenders should have a **5s period** where they can Respawn instantly if they die or manually /kill out.

This is to give them an opportunity to reach the next objective and set up a defence before attackers get there.

- During this time, the Respawn Timer for defenders reads **INSTANT (5s)** and counts down
- Each individual defender only has one free instant respawn, once used the counter returns to normal for that individual
- After the time expires, the Respawn Waves return to normal (*what it would have been without the instant respawn*) for all defenders

This should be available in both Objective & Stopwatch mode as a server-side configurable.

It should also be available as a setting in Private Matches and Community Server settings.

FRIENDLY FIRE BEHAVIOUR

OVERVIEW

Friendly fire is intended for eventual inclusion in competitive modes, to give players a more "hardcore" experience and give them cause to be more cautious about how they use their weapons and abilities. We'll be including systems to allow players to punish those on their team that abuse the system.

FRIENDLY FIRE MODES

Friendly Fire Off

This should be the best anti-grieving option.

Turning off friendly fire should mean that your team-mates can't directly harm or disrupt you as a player.

⚠ With FF Off, players should still always be able to damage their own deployables and themselves.

Friendly Fire On

This should be viewed as the 'hardcore' or 'skilled' option.

When this is enabled, players must be aware of the impact they will have on their team-mates with all their actions. All players are treated equally.

⚠ The exception is when it comes to incapacitated bodies - these NEVER take any damage from Friendly Fire
⚠ Also, friendly objectives (EV's, Generators etc.) should NEVER take damage from Friendly Fire.

FRIENDLY FIRE GAMEPLAY BEHAVIOUR

BULLETS, EXPLOSIVE, FIRE, MELEE, LASER

Basically, anything that deals simple damage to players.

FRIENDLY FIRE OFF
- Bullet impact team-mates but deal no damage
  - *Sniper rounds pass through all pawns*
  - *Owner can still take damage where applicable, such as in the case of turrets*
- Explosives do not deal damage to team-mates
  - *Owner can still take full damage*
- Fire does not deal damage to team-mates
  - *Owner can still take full damage*
- Melee does not deal damage to team-mates
  - *Owner can still take full damage if possible*
- Lasers do not deal damage to team-mates
  - *Owner can still take full damage*

FRIENDLY FIRE ON
- Bullets impact team-mates and deal damage
  - *Sniper rounds still pass through all pawns*
- Explosive deal damage to team-mates
- Fire deals damage to team-mates
- Melee deals damage to team-mates
- Lasers deal damage to team-mates

⚠ One exception here is that Defibs will NEVER deal Friendly Fire damage to prevent accidental deaths when trying to revive

Player Collision

FF OFF: Players <u>do not</u> collide with team-mates but have solid collision with enemies
FF ON: All players have solid collision with each other (and all deployables)

Projectile Collision

This refers to the behaviour of the projectile (i.e.. Grenades) in the air rather than the ending explosion/damage/etc.

- **FF OFF**: Projectiles <u>do not</u> collide with team-mates – they <u>do not</u> detonate on impact where applicable
- **FF ON**: Projectiles collide with team-mates and bounce off – they <u>do not</u> detonate on impact where applicable

Stuns / Flashes

- **FF OFF**: Team-mates do not get stunned or flashed – (*owner still does*)
- **FF ON**: All Players get fully stunned and flashed

Smoke

- **FF OFF**: All Players see Smoke at full opacity
- **FF ON**: All Players see Smoke at full opacity

REVIVR Rifle

- **FF OFF**: Deals <u>no</u> damage to living team-mates. Revives incapacitated team-mates. Damages incapacitated enemies.
- **FF ON**: Deals damage to living team-mates. Revives incapacitated team-mates. Damages incapacitated enemies.

GAME MODES

Each game mode should have the appropriate friendly fire rules set:

1. Public Game Modes - **FRIENDLY FIRE OFF**
   a. In modes where the public can <u>drop in and out</u> freely, there should not be any friendly fire at all to prevent hit and run griefers

2. Ranked Matchmaking Modes - **FRIENDLY FIRE ON**
   a. In modes where random players are brought together to play as a fixed team, we should enable friendly fire

3. Private Matches - **Decided by the Host**

ANTI GRIEFING RULES

With Friendly Fire On, we will want rules and systems in place to discourage players from **deliberately** harming their team-mates.

VICTIM COMPLAINTS

Victim Complaints are intended to give the victim a chance to forgive or punish their attacker. If a Victim:

1. Is **killed** by a team-mate, <u>or</u>
2. Receives **80hp** *(or more)* worth of team-damage from a single team-mate over the course of the past **3 minutes**

Then they are prompted with the following 'chat prompt'

- *"Do you want to punish <PLAYERNAME> for friendly fire?*
- *Type **/p** to punish or **/f** to forgive"*

⚠ The prompt needs to timeout after 25 seconds - if time out is reached the attacker is forgiven

- On a /punish action, the following confirmations are sent:
    - To the victim: "*You have punished <PLAYERNAME>*"
    - The attacker: "*You have been punished for friendly fire (-300XP)*"

- On a /forgive action, the following confirmations are sent:
    - To the victim: "*You have forgiven <PLAYERNAME>, how merciful!*"
    - The attacker: "*You have been forgiven by <PLAYERNAME>, be more careful next time*"

Exceptions

⚠ Team Kills / damage from C4 detonating should *never* trigger a complaint

VOTE KICK

After **3** victim complaints (*from any player*) a vote to kick the offending player is automatically triggered/queued.

AUTOMATIC KICK

After **6** victim complaints (*from any player*) the player is automatically kicked & banned from that specific server for the rest of the game.

⚠ Any player that's kicked should hook into the Abandon, Automatic Loss & Leaver Penalty system.

NEGATIVE XP

Finally, players should be awarded a negative XP rewards for team damage. See Friendly Fire Behaviour for exact behaviours.

CARRY

OVERVIEW

A Deliver objective involves locating an object which must be picked up and delivered to a specific location and is essentially a flag capture.

This objective can be carried out by any class.

DESIGN

Carry Object Concept

- A carry object is an object *with a purpose*. E.g.:
    - A power cell – used to power the target device
    - Ammo replenishment – used to re-supply a static environmental weapon
    - A data core – used to upload info to 'HQ' or satellite comms or w/e

- Successful delivery of the required number of carry objects results in an event which *believably un-gates the next objective*. E.g.:
    - Deliver X power cells to enable the generator and open the door
    - Deliver X ammo to load the static weapon and blow open the door
    - Deliver X data cores to upload the codes and remotely hack the open the door

Consistency

No need for multiple models/objects. Every carry-able will have the same:

- Model/Object, which will be finalised by artists and designers
- Interaction times
- Pick up "location" Models
- Drop off "points" Models

Only one active at a time

- There can be multiple carrys but can only be escorted one by one.
- Treat each carry as its an own objective; link them up in a chain via the "next objective" in the properties

Carry in Hand

- The player must drop their current weapon to equip the carriable.
- Is shown in hands with a first-person model.

Functions & Damage

- **Positive reinforcement**; give players encouragement and benefits to carry it
- **LMB** attacks, does an **instakill**, but has a large windup time with a broad swing arc.
- **RMB** throws carry onto the ground, throws comparable distance to large medpacks.

Initial State

- The carry object is usually located in a position where a previous objective ended allowing access to this item.
- Carry objects spawn at a predefined point in the map, defined by the placement of a SGObjectiveHelperCarryPickUp actor.
- When within line of sight the item should be clearly visible and marked by an IFF.
- The item should also have an associated HUD icon with which to locate the item from anywhere in the map. This is backed up by an indicator on the minimap.

Pick-Up

- Attackers must press 'Use' to pick up a carry object
  - o When within range of the object, (F) prompt is displayed along with the usual interaction bar
  - o When (F) is held, the bar fills quickly, and the pick-up animation is played
- **Interact time to pick up should be 0.25s**

Drop

- **Defenders can return the object to its spawn point by pressing 'Use', which takes 5 seconds**
- Attackers can pick-up the object again as described above
- Killed carriers will drop the object near to where they die (not too close, to prevent conflicts with Medic defib)
- If left for X seconds the item will reset to its original location.

Delivery

- The delivery location is a receptacle which has distinct CDA livery
- Objects can be delivered by inserting them into bays or slots at the destination device by pressing 'Use'
  - o When within range of the delivery location, (F) prompt is displayed along with the usual interaction bar
  - o When (F) is held, a delivery animation is played, both 1st and 3rd person.
  - o **The delivery time should be in sync with the animation. But should stay distinctly less than 1 second.**
  - o **Pickup and delivery times should be uniform across all maps.**

Objective Status Updates

Status updates are broadcast when the carry item is picked up, dropped, or returned. Possible broadcasts (each with unique sounds):
"MojoJojo picked up Data Core A"
"MojoJojo dropped Data Core A"
"Blossom returned Data Core A"
"Data Core A resetting in 5...4..."

HUD

- Carry object is highlighted with an objective icon. There are two possible states:
    - Collect/Disable for when the object is on the ground (for attackers/defenders, respectively)
    - Attack/Defend for when the object is being carried (for attackers/defenders, respectively)

Notes

Once delivered, there's potential for additional defense objectives, eg: defend the delivery site until the generator is charged/rockets are armed/data is uploaded. During this time enemy Engineers can disable the delivered objects individually.

VISUAL AND AUDITORY REPRESENTATION

- The carry object is clearly visible from the map geometry by its IFF
- A shader effect (shimmer) can be applied to the object in order to differentiate it from static environmental objects
- The pick-up and drop off points are visually tailored to fit the object.
- Pick up, drop, return and reset events should each have world space sounds.

SCRIPTING

Collision

- Carry object should respect blocking volumes
- For edge cases, it might be a good idea to create CarryObjectBlockingVolume actor type, which blocks only carry objects

World Components

There are two actors that Level Designers must place: a Carriable Actor, and a Capture Volume.

The Carriable Actor has the following properties:

- Mesh - a mesh representing the object to be carried (e.g. a briefcase)
- Team - dictates which team can carry the carriable. Conversely, the opposing team can return it.
- Name - a localised, human-readable name for use in the HUD
- Capture Volume - if specified, indicates this carriable can only be captured at the specified volume

The Capture Volume has the following properties:

- Carriable - if specified, indicates that only the specified carriable can be captured in this volume

Kismet Nodes

The Level Designer needs to be able to detect the carriable being successfully captured.

Carriables can have the following events attached to them:

- Carriable Captured - has a single output, 'out', that fires when this carriable is captured in any valid volume. The volume in which it was captured is also output as an Object variable.

Volumes can have the following events attached to them:

- Capture Volume Triggered - has a single output, 'out', that fires when any valid carriable is captured in this volume. The carriable that was captured is also output as an Object variable.

CONSTRUCT & REPAIR

OVERVIEW

All characters can perform 'construction' or 'repair' at specific points within the environment. Each construction objective takes X seconds to perform.

The only substantive difference between construction and repair objectives is that repair objectives do not necessarily show a ghost model while in progress (see below).

DESIGN

Constructible Locations

A Level Designer creates a Constructible objective by placing a 'Construct Location' Actor at a position in the map where construction may occur. Typically, there will be one such actor per constructible objective.

Each Constructible Location be either 'enabled' or 'disabled', indicating whether or not construction can commence at the specified location. This is communicated via IFFs being present or not.

Starting Construction

In game, a player of the same team as the Constructible Actor may move within interaction distance of the Actor. As soon as they are close enough, they can use their pliers/blowtorch to construct the objective.

During Construction

Each second that passes while the player uses their tool on the constructible, the construction progresses up to the Construction Time specified by the objective. Therefore, if the Construction Time is set to 30 seconds, it will take a single player (with a 100% speed tool) 30 seconds of interacting with the objective to fully construct it.

Fizzle: Constructible can reset back to 0% progress ("fizzle") if they are not interacted with by any friendly players for the period specified by 'Reset Time'.

Completion

Once construction reaches 100%, the objective is considered 'complete'.

When this occurs, players who contributed towards construction are credited with an amount XP relative to the contribution they made.

The Level Designer will trigger any associated effects, such as the addition of world geometry, environment-specific sound and particle effects.

Objective Status Updates

Status updates are broadcast when the construction is started and when it is completed. If the construction was stopped and was left for enough time for the progress to fizzle, the start message is displayed again should a player start constructing again. There should be a notification sound for each, and ideally a difference between the notification sounds for primary and secondary construct objectives.

VISUAL AND AUDITORY REPRESENTATION

Constructible locations are clearly marked by friendly or hostile IFFs. When they are under construction, a ghosted version of the constructible appears as long as there is progress on the entity. It solidifies instantly when the construction is complete. If a constructible objective is disabled by the map while progressing, it is reverted to its un-constructed state and disabled. For example, if a defending player is building a barricade in London Bridge as the EV approaches, but doesn't complete the construction before the EV arrives, all progress is lost, and the constructible objective is disabled.
A "constructing" sound plays while the player is using their pliers/blowtorch, and a "constructed" sound plays when construction is finished. The constructing sound is in world space and local for the player that is constructing, and only world space for other players.

SCRIPTING

World Actors

A 'Construct Volume' specifies a volume that players can interact with. Provided this volume is within the construct interaction distance, and is pointed at by the crosshair, then the interaction can take place.

This volume specifies a Team, Location Name and Construction Time (in seconds).

- Team - indicates which Team members may construct this objective
- Location Name - a localised string naming the location (e.g. "The Big Blue Crane")
- Construction Time - a time, in seconds, specifying how long it should take a single player to construct this objective.
- Reset Time - a time, in seconds, specifying the period that players have to resume construction before it resets to 0%.

Kismet Nodes

Level Designers need to be able to detect the start of construction, interruption, completion, and reset. The following event nodes will be required:

- Construction State - has several outputs
    - Started - fires when the objective enters the 'being constructed' state.
    - Interrupted - fires when the objective exits the 'being constructed' state but does not enter the 'fully constructed' state.
    - Completed - fires when the objective enters the 'fully constructed' state.
    - Reset - fires when the objective is reset to 0% (this may happen if there has been no player interaction for 30 seconds)

Level Designers will be responsible for hooking up this output to trigger the relevant effects.

A 'Toggle' action node can be used to enable/disable the Destructible Volume. In doing so, any existing charges placed in the area will be removed.

DESTRUCTIBILITY

Constructible are not destructible.

However, a constructible can be made destructible by scripting a Constructible objective and a Destructible objective such that they switch states as is appropriate.

DESTROY

OVERVIEW

Destructible objectives rely on a player planting C4 close enough to the objective to damage it. Players of the opposing team can defuse these explosives, but if one explodes, the objective is considered complete.

DESIGN

Destructible Location

A Level Designer creates a Destructible objective by flagging an entity as either a primary or secondary Destructible object.

Each Destructible can either be 'enabled' or 'disabled', indicating whether it can be destroyed (i.e. listening for explosives).

Placing Charges

Once a C4 charge is armed at a destructible objective, a message is broadcast to all players, e.g. "Player X has placed a charge at the Location!"

Detonation

The player who placed the charge that destroyed the objective is credited with XP. In addition, they will earn XP for any enemy players killed as a result of the explosion. Friendly players may also die but will not affect the XP of the player who planted the charge.

The Level Designer will trigger any other effects, such as the destruction/removal of environmental objects, environment-specific particle effects, and environment-specific sounds.

At this point the Destructible becomes 'disabled' and no further charges may be placed at this location, unless the LD explicitly re-enables it through Kismet.

Objective Status Updates
Status updates are broadcast when the destructible object is destroyed, when a C4 is placed close enough to destroy it, and when a C4 charge placed close enough to successfully destroy the objective is defused. Possible broadcasts (each with unique sounds):
"MojoJojo planted C4 at the 2nd Stoney St Barricade"
"MojoJojo has destroyed the 2nd Stoney St Barricade"
"Blossom disarmed the C4 at the 2nd Stoney St Barricade"

VISUAL AND AUDITORY REPRESENTATION

A destructible objective clearly visible from the map geometry by its IFF. If destroyed, particle effects mask the disappearance of the objective. If it is a primary objective it will not normally be able to be reconstructed by the other team, so permanent debris can be added to the area as long as it doesn't need new collision. If it can be reconstructed, after a short period of time the destroyed model for the objective is reset to the unconstructed model.

SCRIPTING

Map Components

Each destructible consists of a single Destructible Volume in the world. The volume specifies:

- Team - indicates which Team can destroy this objective.
- Location Name - a localised string naming the location (e.g. "The Warehouse Door")
- Objective - reference to an Objective actor represented by this destructible

This volume dictates the radius in which charges can be placed, and its world origin may be used in the HUD to indicate location.

Kismet Nodes

Level Designers need to be able to detect the objective being successfully destroyed.

- 'Destructible' event has one output:
  - Destroyed - has a single output, 'out', is fired when a charge explodes within the volume, provided the volume is 'active'

Level Designers will be responsible for hooking up this output to trigger the relevant effects.

A 'Toggle' action node can be used to enable/disable the Destructible Volume. In doing so, any existing charges placed in the area will be removed.

ESCORT

OVERVIEW

The attacking team must escort an entity along a proscribed path, normally an armoured vehicle of some sort. The entity only moves forward when the attacking players are within a defined radius around the entity, and it always moves at a constant speed. In Boro Market the escort entity is a vehicle that also has a mounted machine gun, but this is not a requirement of all escort entities.

DESIGN

Initial State

Escortable vehicles may start in a unique "awaiting start-up" state, disabled, or with full health depending on the needs of the map. The starting health and state of the entity should be exposed to allow for this. (E.g. There is a damaged vehicle in enemy base that is repaired and then stolen)

Movement

The vehicle moves at a constant rate should one or more attackers remain within proximity of the vehicle. This is a radius specified by the Level Designer and moves relative to the vehicle.

The vehicle will stop moving under the following conditions:

- No attackers are inside the escort radius.
- All attackers inside the escort radius are incapped or killed.
- The vehicle's health is reduced to **zero**.
- The vehicle reaches a barricade or similar obstruction.

Vehicle Damage and Repair

The vehicle may take damage whether it is in transit or not. Upon reaching zero health it is considered disabled and cannot move again until it has been **fully** repaired.

The armoured vehicle can be damaged by explosive weapons and is disabled after receiving enough damage (this damage is team agnostic).

When damaged, friendly players can repair the tank by using their pliers/blowtorch. When it's health reaches 100% it may be escorted again.

Objective Status Updates

Status updates are broadcast when the escort entity is disabled, when it is successfully repaired, and when it arrives at or passes objectives or key landmarks in the map (3 separate notification sounds are needed).

States

- **Idle -** Health greater than 0, no friendly players within radius
- **Moving -** Health greater than 0, friendly players within radius
- **Disabled -** Health at 0

VISUAL AND AUDITORY REPRESENTATION

These states should be communicated visually and audibly from the escort entity itself. In Boro Market, for example:

The APC has a radio dish at the front when idle stands upright and only moves slightly, and plays an idle-ish sound. When moving, the dish spins fully and plays a transmitting-ish sound. When the APC is disabled, the dish droops and does not move, and plays a broken-ish sound.

The in-world feedback is supplemented by an IFF on the escort entity which shows either health or repair level.

SCRIPTING

Depends entirely if Escort objectives use the existing Matinee-based approach or use a node-based solution. It's feasible that we'd only need to know when the escort has reached certain points and the end. There'd be little reason to know when players enter/exit/start/stop escorting, as the logic there should be handled by game code.

NOTE:

Game code needs to be able to calculate progress along the path as precisely as possible, to mitigate the possibility of ties in Stopwatch Mode.

OBJECTIVE PROGRESS HUD

This page details the required behaviour of the Objective Progress HUD and IFF behaviour for Attackers and Defenders.

Generally, this includes updating the Objective Progress HUD to include the animated behaviour of the IFF icon, the latter of which may not always be visible (*such as with carriable objectives*).

Required changes from the current behaviour are highlighted with ⚠️

C4 CHARGES

(*please ignore typos in the images*)
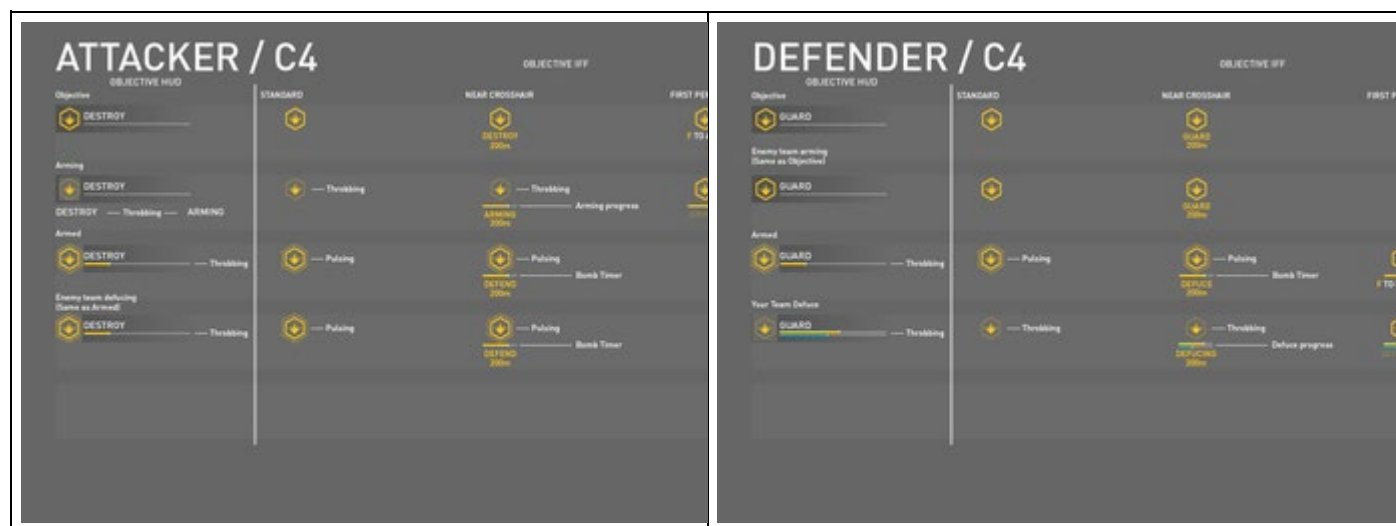
Attackers

- ⚠️ The C4 Objective HUD icon should 'throb' when a charge is being armed
- ⚠️ The C4 Objective HUD icon should 'pulse' when a charge is planted
- ⚠️ Attackers should <u>never</u> see the blue 'disarming' bar on the C4 Objective HUD
- ⚠️ Attackers should only see the blue 'disarming' bar on the C4 IFF when they have <u>line of sight</u> on the defuser or the C4 charge

Defenders

- ⚠️ The C4 Objective HUD icon should 'pulse' when a charge is planted
- ⚠️ The C4 Objective HUD icon should 'throb' when a charge is being disarmed

ESCORT OBJECTIVES

(*please ignore typos in the images*)

Attackers

- ⚠️ The Repair EV Objective HUD icon should 'throb' when the EV is being Repaired
- ⚠️ The Escort EV Objective HUD icon should 'pulse' when the EV is being Escorted

Defenders

- ⚠️ Defenders should <u>only</u> see the yellow 'repairing' bar on the Defend EV Objective HUD, when one of them has line-of-sight
    - When no defenders have line of sight, the most recently seen progress is still shown, however the progress bar turns to the <u>darker yellow</u> variant
- ⚠️ Defenders should only see the yellow 'repairing' bar on the Defend EV IFF when they have <u>line of sight</u> on the Repairer or the EV
- ⚠️ The Destroy EV Objective HUD icon should 'pulse' when the EV is being Escorted

DELIVERY OBJECTIVES

(*please ignore typos in the images*)
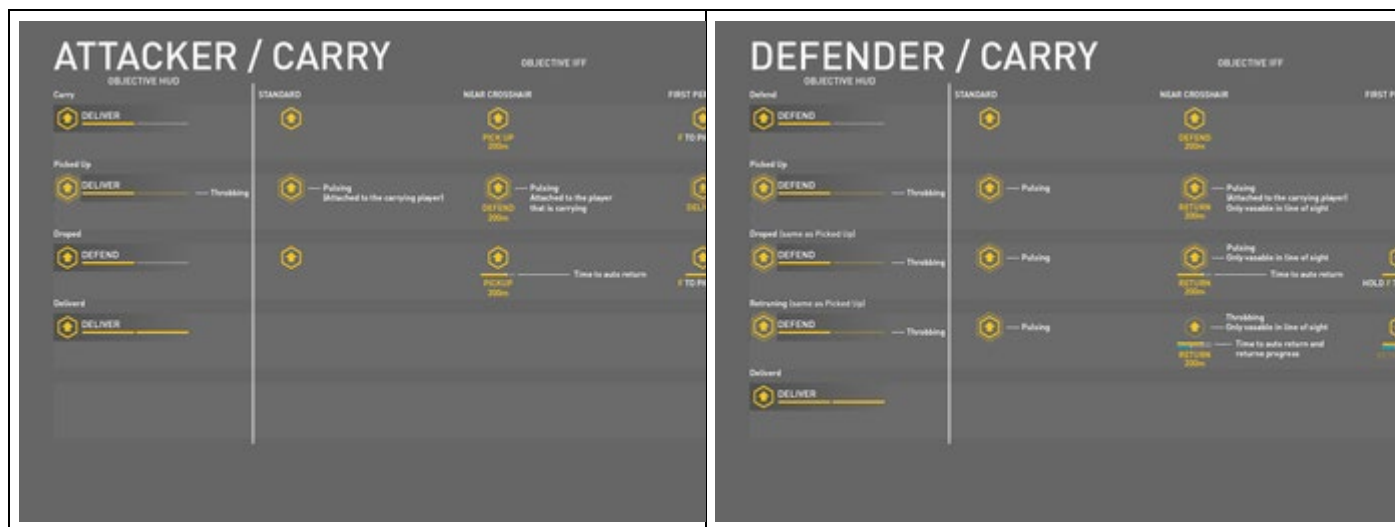
Attackers

- ⚠ The Deliver Objective HUD icon should 'throb' when the Carriable has been picked up
- ⚠ The Deliver Objective HUD bar should partially fill and 'throb' when the Carriable has been picked up
- ⚠ Attackers should only see the blue 'returning' bar on the Carriable IFF when they have <u>line of sight</u> on the returner or the Carriable

Defenders

- ⚠ The Deliver Objective HUD bar should partially fill and 'throb' when the Carriable has been picked up
- ⚠ Defenders should not receive notifications for Dropped or Picked Up actions (*beyond it being taken from the initial spawn point*)
- ⚠ Defenders should not see a Dropped Objective IFF through walls, only with line of sight
- ⚠ Defenders should see the a 'returning' blue progress bar when they have <u>line of sight</u> on the returner or the Carriable

OBJECTIVE DAMAGE

In Dirty Bomb there are several Objective types that can be damaged by abilities.

Below is a breakdown of these objectives/abilities and how many 'strikes' it should take to destroy each type.

These values are **general approximations**, they may vary a little in places due to angle of attack/positioning etc.

Objective	Health	Airstrike	Artillery	Molotov	Orbital Laser	Nader Nade	Fragger Grenade	Sticky Bomb	Proxy Mine
EV (Chapel/Bridge)	1,200	1	3	2-3	2	14	8	12-13	7
Large Gen (Bridge/Terminal)	1,000	N/A	N/A	3-4	N/A	13	6	11-12	6
Ramps (Chapel/Dome)	500	1	1-2	1-2	1	6	3	5-6	3
Small Gen (Underground)	500	1	1-2	1-2	1	6	3	5-6	3

Molotov Grenades will be very variable since the number of fire-points in contact with the Objective dictates how much damage is dealt.

OBJECTIVE: REPAIRING

OVERVIEW

Repairing is an objective which all players are able to complete, although different Tools and Augments will allow for quicker completion of the objective. A repair objective will restore functionality to something within the level, which in most cases will be a secondary Generator, however other objectives can be repaired such as secondary Doors and even a primary objective.

GOALS

- To add more variety in objective types.
- To implement an objective type which promotes heavy team-play, encouraging players to cover their team-mates.
- To provide a different objective type, which players can complete with logged progress, as opposed to a timed objective.

USER STORIES

- As a player, I want to see a common objective that can be used as a primary and secondary objective.
- As a player, I want an objective that promotes team-work, allowing me to cover my team-mate for a short amount of time, while they complete it, or vice-versa.
- As a player, I would like to see an objective that I can reliably complete without having my progress reset upon dying or leaving the objective site.

FUNCTIONALITY

Any Merc has the capability to repair an objective, however the speed of repair depends on the tools that the Merc has equipped.

Tool	Repair Speed
Blowtorch	100%
Pliers	33.3%

Repairing

A Merc can begin repairing an Objective by walking within proximity and activating their 'Use' button (default F). The player must also be looking at the Objective to interact with it.

- ℹ️ If the player stops repairing, the progress on the repair is stored. It should not reset, and another player may continue the progress.

Interrupting Repair

If a player is repairing, they can only be interrupted by:

- Dying while repairing
- Looking away from the Objective
- A player, faster at repairing, starts to repair the same Objective
- The Objective becomes inactive (e.g. the map progresses)

Repair Hierarchy

Only **one player** can repair at a time. If another player of the same importance attempts to repair the same Objective, they will not contribute in any way.

HUD

A progress bar should be displayed to the player, on the objective they are completing. The progress should be logged on a HUD element, which shows the overall progress to completion.

~20% completed objective:

**~75% completed objective:**

Multiple Players Repairing

If two (or more) players are attempting to repair an objective, the players who are not contributing will be displayed a message, informing them that they are not contributing and that their team-mate is currently the one repairing the objective.

It is crucial that **no progress bar is displayed** to a player who is not actually completing the objective, else they could confuse it for their own progress.

AMMO CACHES

These are Level Designer placed Actors in the world. Players can claim ammo when within the radius of the Actor.
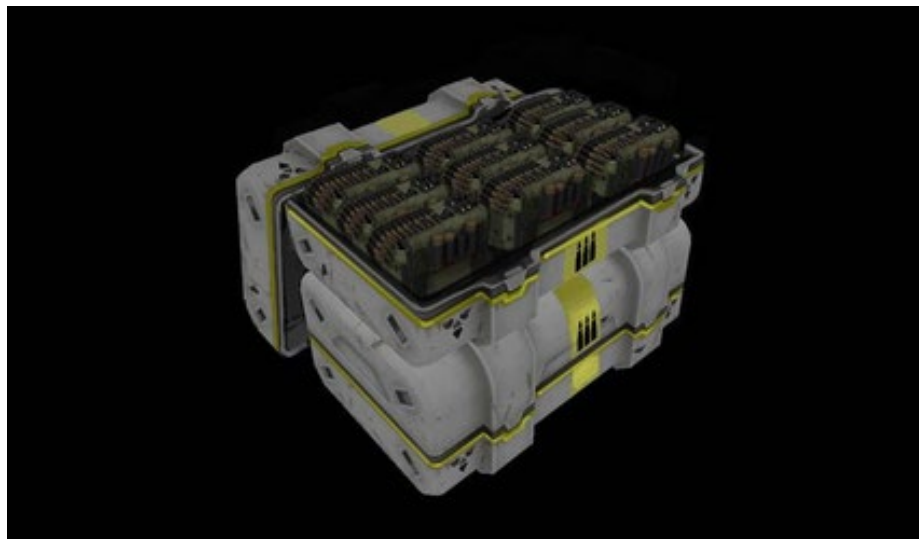
BEHAVIOUR

- Players can reclaim ammo up to their initial spawn amount
- Ammo is claimed every few seconds, at a set rate

DIMENSIONS & PLACEMENT

- The cache should be easily traversable given it will not be large enough to provide tall cover.
- The cache should be low enough to **not** restrict shorter characters (i.e. Proxy) to use it as low cover.
- Caches **CANNOT** invalidate or diminish the importance of ammo giving Mercs.
- They should be placed such that they are close enough to the main routes / action that you would rather restock there than suicide, but far enough away such that players have to go off the beaten path a little and into otherwise underused / not critically important areas.
- They must not be placed on main paths such that they can be casually collected, nor near an objective or critical tactical point / place of overwatch such that people on those positions can hold the position well while still restocking.
- Ideally, players should not be engaging in combat using the cache as cover; for example, bad placement would be putting it in the very middle of an empty room.

VISUALS

- Given the crate will likely be placed in areas off the beaten track and in corners of rooms, it needs to stand out against the environment. Ideally a work light, or LEDs could be attached to it.
- The ammo packs themselves should be the smaller ammo packs.

MOUNTED MACHINE GUNS

Mounted Machine guns are powerful weapons that are placed at predetermined points in the levels or are sometimes mounted to vehicles. They cannot be moved and can be used by either attackers or defenders. They have infinite ammo, but use an overheat mechanic, defined below.

If in a nest, they have a default horizontal firing arc of 140 degrees, and a default vertical firing arc of 90 degrees. The 4-orthogonal axis each have independently configurable turning limits, which can be adjusted to suit the surrounding geometry. If mounted on a vehicle, the machine gun can rotate up to 360 degrees horizontally, and 90 degrees vertically.

Machine guns should always be played on completely solid structures that protect the lower half of the body of player using them.

Machine guns mounted on Escort vehicles cannot be damaged independently of the vehicle; they are considered part of the vehicle, so damage to them results instead in damage to the vehicle. When the vehicle is in its disabled state, the machine gun cannot be used. If a player is using the mounted machine gun when the vehicle transitions from functioning to disabled, they are killed, and the credit for their death goes to the player that last successfully damaged the vehicle.

Mounted Machine guns have separately configurable FOV and mouse sensitivity settings, which iron sights mode layers on top of.

- ⚠️ Players should be able to zoom in using the 'iron sight key' to get a tighter FOV, without any behaviour changes.
- ⚠️ Players are damaged as normal when using Mounted Machine guns.

OVERHEATING MECHANIC

Overheating is the gameplay counter to the extremely powerful features of having infinite ammo and high damage. While firing, a Mounted Machine gun builds up an overheat counter. This counter increments on a configurable curve, such that the count increases faster the higher the current count. When the gun isn't firing, the count diminishes using a similar but separately configurable curve. Mounted Machine guns dissipate heat slightly more slowly than they accumulate it. The weapon barrel glows more and more particles emanate from it as the overheat counter rises.

If the overheat counter can reach its maximum, the machine gun enters the Overheated state, and cannot be fired until it cools down to 50% of the overheat counter.

QUICK JOIN

OVERVIEW

Quick Join is a one-click system that connects players to the best current server available.

GOALS

- To get players into a match as fast as possible
- To create/maintain full and balanced matches
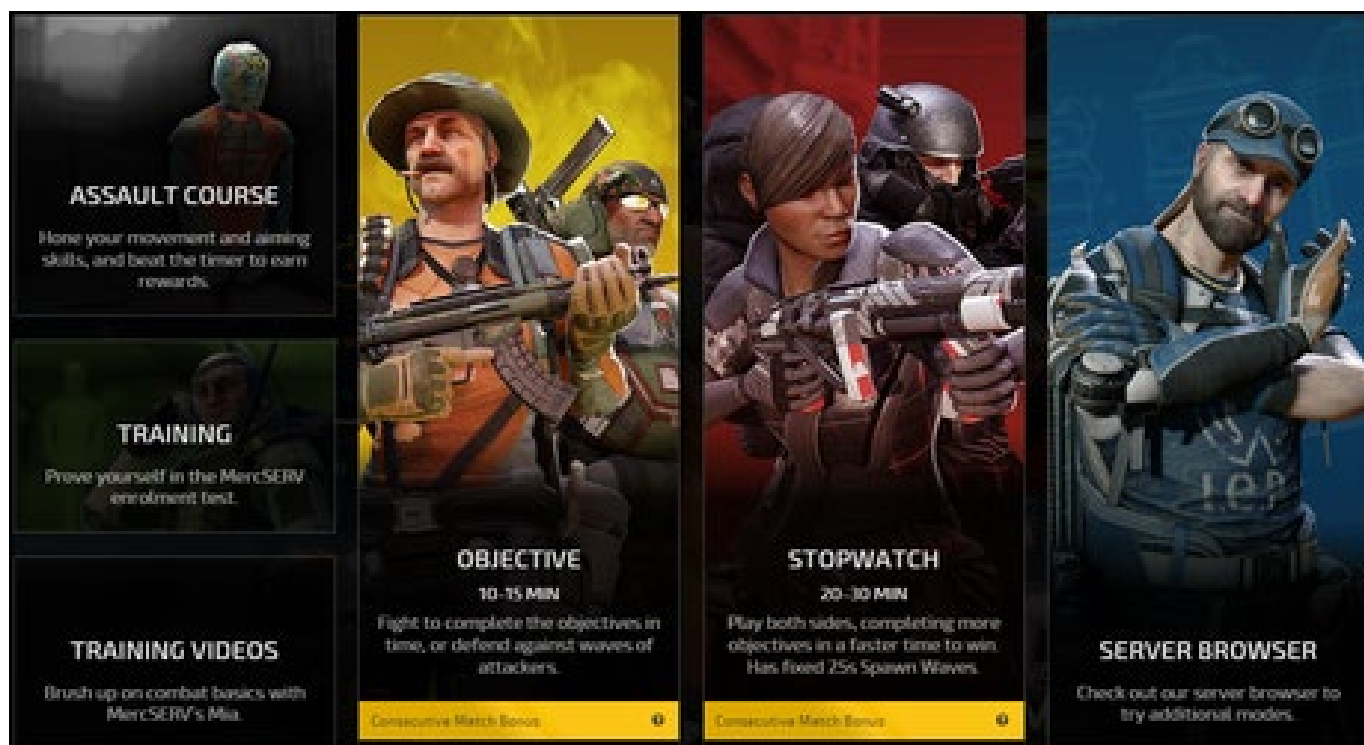- To connect players to nearby servers with a low latency

USER STORIES

- As a player, I want to be able to quickly jump into to a fun & enjoyable session

FUNCTIONALITY

Play Menu

When the player clicks the Play Menu they are presented with two Quick Join modes, Objective & Stopwatch.

Sub Region Selection

The first thing that Quick Join does to filter down the server list is that it will only return servers that advertise themselves as a nearby region.
It achieves this by each client pinging multiple 'ping sites' when they boot the game/at regular intervals. Depending on the more general region of the player, the client then only requests servers from nearby **sub-regions under XXms**.

- Europe - West: **60ms**
- North America: **75ms**
- Australasia: **90ms**
- Europe - East: **90ms**
- South America: **110ms**
- Asia: **110ms**

At this point, the backend will then send a random **selection of 30 servers** from which the quick-join algorithm will choose the 'best' server.

If there are no available servers in this list (*or no nearby regions*) then the game will select another 30 servers from the entire worldwide pool, which can lead to users connecting to sub-regions beyond the defined thresholds.

Quick Join Algorithm

This factors in various weighting and ends up giving each server a 'score'. The server with the highest score gets chosen and the player will attempt to connect.
If the player can't connect, it will try the next highest scoring server and so on. The factors are as follows (in loose priority order):

1. Server Ping
2. Player Count
3. Average Level
4. Level Locked (Yes/No)
5. Pregame State (Yes/No)

MERCS

OVERVIEW

Mercs reflect the "classic" roles from Splash Damage's various ET-style games, but with modern versatility and sensibilities. They have personalities and attitudes that players can relate to, and also have complementary gameplay mechanics; this strengthens relationships between certain personality types through shared gameplay. The design of the mechanics of their weapons and abilities deliberately create high potential for mastery and a high skill ceiling overall.

GOALS

- Dirty Bomb's Mercs should reflect Splash Damage's mission, values and our roots
- Dirty Bomb should have Mercs that have complimentary mechanics that encourage teamwork and exploration
- Dirty Bomb's Mercs should encourage players to play together in ways that are both complimentary and directly competitive
- Dirty Bomb's Mercs should provide a variety of goals to suit the different player personality types, focusing on our key target markets
- Dirty Bomb's Mercs should provide players with a modern take on the classic ET formula
- Dirty Bomb should have a Merc roster that reflects the unified diversity of Splash Damage
- Dirty Bomb's Mercs should have a high mechanical skill ceiling that encourages both individual mastery and cooperative mastery
- Dirty Bomb's Mercs possess unique combat roles and abilities that cater to different playing styles
- Dirty Bomb's Mercs are defined by their unique abilities when it comes to gameplay

USER STORIES

- As a player, I find the characters in Dirty Bomb relatable and super cool
- As a player, I like that all of Dirty Bomb's Mercs are effective fighters if I'm a decent twitch shooter player
- As a player, I like that Dirty Bomb has characters that create a variety of things that I can target to do, which keeps things from feeling stale
- As a player, I love that there are always areas to improve my skills with different Mercs
- As a player, I like learning about the backstories of the characters as it helps to flesh out the world that they live in
- As a player who primarily cares about destroying other players via my skill and tactics, I like how skill based the Mercs are and how their weapon and abilities magnify this
- As a player who primarily cares about supporting my teammates, I like how some Mercs are focused on this and allow for mastery within that space
- As a player who primarily cares about my actions impacting the flow of the game and the game mode, I like how some Mercs are focused on different ways to achieve the map objectives

AURA

OVERVIEW

Aura is a combat medic with an attitude. She is a defensive Merc, being able to set up key positions with her Healing Station to provide powerful, constant healing to allies. Her speed is one of her main attributes – being able to rush in and revive allies who are downed during combat, faster than other medics can do.

GOALS

- To implement a Merc with the capability of providing a constant healing source to their allies.
- To expand the Medic Merc-pool with a fast run-speed Medic.
- To introduce a Medic that has simple to understand mechanics and can be played effectively at all skill levels.
- To expand the 'World of Mercs' and introduce a Southern-USA Merc.

USER STORIES

- As a player, I want a Merc that can provide constant healing to my allies.
- As a player, I want a fast combat Medic.
- As a new player, I want a Medic that can be played easily.
- As an American player, I would like to see more regions of the USA represented in Dirty Bomb.

MERC DETAILS

- **Name**: Aura (also known as Medic_02)
- **Nationality**: American – USA

- **Role**: Light-on-her-feet combat Medic with some highly concentrated healing potential.
- **Behaviour**: Aura can set down her Healing Station at key positions to keep her team topped up, while running in and out of cover quickly to revive her team-mates. Aura's movement is key to her survival.

- **Body Type**: Skinny
- **Health**: 80 HP
- **Max Sprint Speed**: 470 units per second.
- **Eye Height**: 68 units

PERSONALITY & BACKSTORY

Aura beat off the fierce competition for a paid internship at Pirin Medical. Aura was placed in the experimental resuscitation department, where she took it upon herself to totally overhaul their approach to revival tech. Initially her Supervisor was sceptical, but she worked around the clock, and presented her Supervisor with a working prototype that she had created entirely by herself. Impressed by her hard work her Supervisor put her work into production and halted the team's previous projects. This caused some resentment among her team members, who started to plot their revenge.

Midway through her placement it became apparent that someone was leaking the tech. Looking for someone to blame the Pirin managers settled on Aura. Her colleagues were resentful of her progress and submitted a tip off that Aura had been taking confidential material home. Aura was fired and blamed for the security leak. The tech was released with Aura's name conspicuously absent from the firm's research papers.

What they didn't release was that Aura had a second more powerful prototype in development that she hadn't submitted, saving it so she would have more leverage when applying for a permanent job on graduation. With Pirin's betrayal still stinging Aura decided to keep working on her prototype tech and go into business for herself.

Since her name had been blacklisted by Pirin, Aura found getting funding for her own project impossible. With her student loans hanging over her Aura took on Merc work, so she could pay her bills and field test her latest prototypes.
Hearing rumours of experimental medical tech being used in London, Aura packed her bags and registered for MercSERV, intending to scope out the competition. What she wasn't expecting to find was a Merc using a revival gun with a suspiciously close energy pattern to her early Pirin prototype work.

HER OWN WORDS...

"Aura's the name, healing's the...hell, it ain't no game. Serious business."
"Aura the Medic, yadda yadda, heals the ill, shoots the healthy - are we done?"
"What don't destroy you makes you stronger. Not me. I'll just destroy you."
"Aw honey, you're so out your depth the fish have lights on."

"What do you want? Yeah, you, I'm talking to you, it's your grill I'm up in, noticed yet? Call me Aura. Combat medic. Don't you DARE give me that look. I see it all before. People say I'm too Country. Like that ever stopped anyone joining the army. People don't think I'm a qualified medical practitioner. They must think I'm some hospital cleaner who got all rowdy and ambitious and stole some fancy scrubs and a stethoscope. To hell with that. I got qualifications hanging out my ass, I been patronised by fancier folks than you, damn, I'll doctor you right in half if need be. I'll heal your ass, I'll heal your buddy's ass, I'll drop your enemies in neat piles. How about that for service? Yeah, I should hope so."

HEALING STATION

Placement

When the Healing Station is off cooldown, Aura can place it at any time. The placement toggle can be activated by holding 'E' (Ability Slot 2) or pressing '5', and a hologram/wireframe of the Healing Station will be shown to Aura. This will help display to the player, where the Healing Station will be placed upon confirming. To indicate that the Healing Station can be successfully placed, the hologram will display in **blue**.

Deploying

To confirm deployment, the player should release the 'E' key or press the 'Fire' button to confirm. This will place the Healing Station wherever it is currently aligned.

⚠ **Unable to place**: Some areas should not allow the Healing Station to be placed (to ensure no clipping issues occur). In this instance, the Healing Station's hologram turns **red**.

Deployed

Once deployed the Healing Station will provide **constant healing** to all friendly Mercs within its area-of-effect. The Healing Station will **never** heal enemy Mercs, unlike Health Pack healing abilities.

ⓘ A visual AoE will be displayed on the ground, indicating where players must stand to get healing.

Reclaimed

Aura can reclaim her Healing Station to reposition it, at any time. Reclaiming the Healing Station is instant once selected to do so.

The amount of cooldown returned, upon reclaiming the Healing Station, scales to the amount of HP the Healing Station has left. eg.

- *A 100% health Healing Station will return **65%** of the cooldown.*
- *A 50% health Healing Station will return **32.5%** of the cooldown.*

Note: *65% is the highest cooldown return possible.*
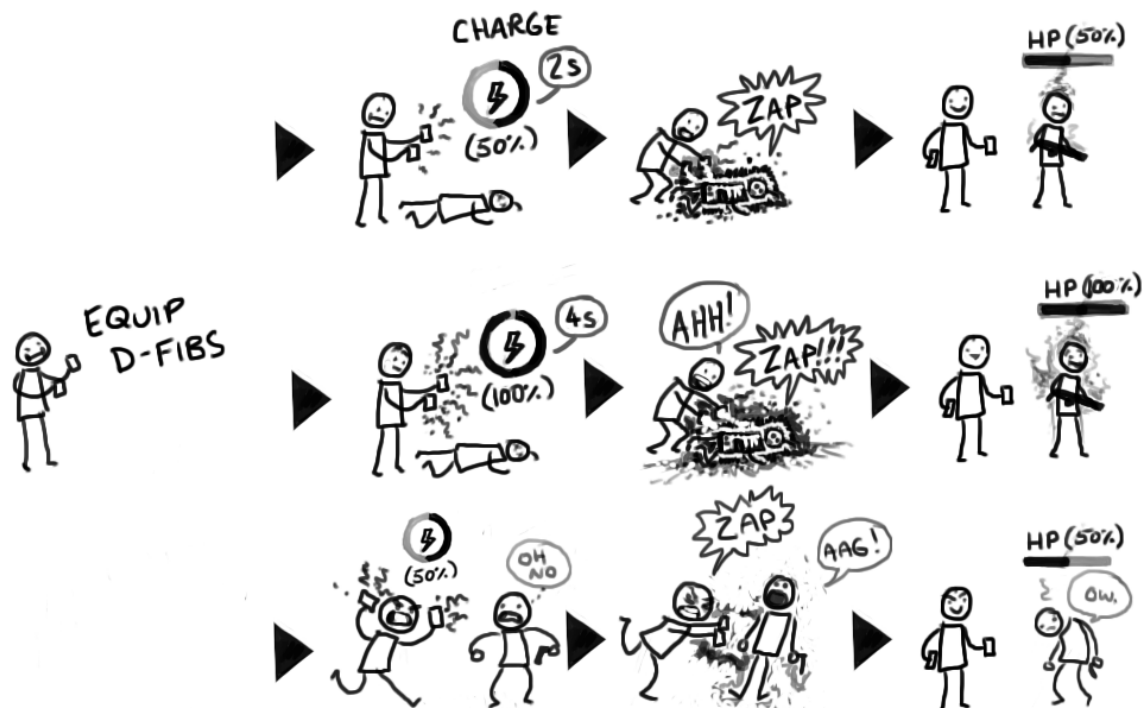
Destroyed

Aura's Healing Station can be destroyed by enemy Mercs.

⚠ Upon being destroyed, the Healing Station should display a small *explosion effect* (**non-damaging**) and disappear.

DEFIBRILLATORS

Charging Defibrillators

The Defibrillators can be charged by pressing and holding 'E' (Ability Slot 2), or by equipping the Defibrillators and holding the 'Fire' button. The longer that the Defibrillators are charged for, the more health an ally Merc will be revived for. While charging the Defibrillators, Aura will be restricted to the 'walk' movement speed.

> ℹ️ Defibrillators have a 'maximum charge' and will reach this point after

Defibrillating an Ally

An ally must be in range of Aura and the defibrillator to be revived. They can be aimed like any weapon and should be within approximately melee-range to affect a downed ally.

Reviving

Upon a successful revive, the ally will begin to rise to their feet. There is a short grace-period between being revived and being able to move. After this, the ally will have a brief period to spawn protection (to prevent them being instantly killed again upon being revived).

> **Note:** A Merc's health on revive cannot be higher than their base health.

Offensive Defibrillators

The Defibrillators can also be used as a close-range weapon against enemy Mercs, dealing an amount of damage scaling off the charge. However, the slow movement speed while charging is restricted, so it can be quite risky to use them in a heat of combat.

ℹ️ Defibrillators can also be used to gib downed enemies, like a melee weapon.

Default Weapons

Primary	Secondary	Melee
Remburg 7	Caulden Pistol	Beckhill Combat Knife

GUARDIAN

OVERVIEW

Guardian is a front-line support Merc, providing a deployable protective explosive-free area for her team-mates and at the ready to revive them if they are downed. She will have somewhat limited combat capabilities, her role is to stay alive, keep her team-mates alive and help them take out the opposition.

GOALS

- Add a Merc with the ability to shield objectives like an EV or a generator from explosive to give the team a real chance against a horde of Field Ops and Soldiers.
- Add a new type of Medic that hasn't been seen in the game yet (hybrid).
- Expand the "World of Mercs" by introducing a South Korean Merc. This allows us to extend to DB universe to another territory.
- Addition of a Merc that requires some time to master. The mastery of abilities should be a satisfying goal for players.

USER STORIES

- As a player, I want to have a counter to explosive spam, because this is ruining my game experience right now.
- As a player, I want to play a Medic that also uses an Assault Rifle.
- As a player, I am getting bored of the same types of abilities. I would appreciate it if the classes could be mixed up a bit.
- As a Korean player, I want my country to be represented in the game.

MERC DETAILS

Name: Guardian (also known as Medic_05)
Nationality: Korean

Role: Guardian is a frontline support Merc, providing a deployable protective explosive-free area for her team-mates and at the ready to revive them if they are downed.
Behaviour: Alert, constantly checking, watching her back and the backs of her team, eye on airborne incoming fire.

Body Type: Medium
Health: 110 HP
Max Sprint Speed: 430 units per second
Eye Height: 76 units

PERSONALITY & BACKSTORY

Guardian grew up in Seoul with her parents and maternal grandmother. She was particularly close with her grandmother who often took care of her when her parents were working. Guardian's grandmother was a nurse when she was younger and encouraged Guardian to pursue a medical career.

Guardian opted to live with her parents for most of her medical education to remain close to her ageing Grandmother and save her parents money. Just after her graduation whilst Guardian was overseas attending a medical summit, Seoul was hit with a series of terrorist attacks. An anti-technology terror organisation later claimed responsibility. Her parents' house was one of those damaged, however the CDA were able rescue all the civilians including Guardian's family since they already had a sizable presence in South Korea.

Guardian returned home to her family who were living in temporary accommodation provided by the CDA. Since Guardian was newly graduated and looking for work the CDA support worker assigned to Guardian's family suggested she take up front line medical work. Initially Guardian worked a variety of contracts with the CDA and the South Korean government, augmenting her medical training with front line combat and field medicine skills. A talent scout for Pirin Medical noted Guardian's high potential and invited her to work for an experimental test facility.

Guardian proved as adept at weapons handling as she was at medicine, however after the attack on her family Guardian's priorities still lay with preventative measures and support. This led Guardian to be assigned to the Sky Shield project. After a period of intense testing in the Pirin labs Seoul facility it was determined that the Sky Shield needed proper field testing. After many rival firms and even an ex-Pirin employee were spotted testing in London it was determined that Pirin itself needed to collect some field data.

SKY SHIELD

The Sky Shield is Guardian's primary ability. This device is attached to her body and can be deployed almost anywhere on the battlefield to set up a device that temporarily neutralises incoming projectiles such as Grenades or Airstrikes. Essentially: line traces go through and moving objects don't.

This protective zone allows her team to effectively set up a defence or complete an objective. The Sky Shield hovers, removing complications with terrain. The Sky Shield is roughly the size of a healing station and has a miniature weapon array that appears to be shooting down projectiles with rapid targeted laser beams.

Notable Points

The Sky Shield...

- **hovers** above ground rather than sitting flush like proximity mines
- is thrown out in the environment like a proximity **mine**
- has a slight **deploy-time**, like the turret
- has a big area-of-effect that can protect the EV
- has a **lifespan**, during which it blocks all enemy projectiles until disabled/destroyed
- lifespan should be visible on **Guardian's HUD**
- enemy projectiles are shot down instantly with a quick, intense and **visible laser beam**
- when reclaimed, the CD reduction is relative to how long the AARG has been deployed (0s = 65%, 20s+ = 20%)

- Merc Interaction with the Sky Shield. Disintegration means the projectile is instantly neutralised in a puff of smoke, dealing no damage.

Merc	Interaction (Friendly)	Interaction (Enemy)
Aimee	None	SNITCH is shot down and disintegrated mid-air If already attached to a wall then no interaction
Arty	None	Artillery projectiles are shot down and disintegrated mid-air
Aura	None	None
Bushwhacker	None	None
Fletcher	None	Sticky Bombs are shot down and disintegrated mid-air If already attached to a wall then no interaction
Fragger	None	Frag Grenades are shot down and disintegrated mid-air
Hunter	None	Arrows are shot down mid-air
Javelin	None	Rockets are shot down and disintegrated mid-air
Kira	None	None
Nader	None	Grenades are shot down and disintegrated mid-air
Phantom	None	EMP temporarily disables the AARG
Phoenix	None	None
Proxy	None	None
Red Eye	None	Smoke Grenades are shot down and disintegrated mid-air If deployed already then no interaction
Rhino	None	None
Sawbonez	None	None
Skyhammer	None	Airstrike Markers are shot down and disintegrated mid-air Airstrike Projectiles are shot down and disintegrated mid-air
Sparks	None	None
Stoker	None	Molotov Grenades are shot down and disintegrated mid-air, no fire is spawned
Thunder	None	Concussion Grenades are shot down and disintegrated mid-air
Vassili	None	Heartbeat Sensors are shot down and disintegrated mid-air If deployed already then no interaction

BIONIC PULSE

The Bionic Pulse is an 'area of effect' ability that allows Guardian to revive several teammates from a close distance. The pulse is emitted from the palm of her left glove.

Defibs	Bionic Pulse	REVIVR Rifle
Aura	Patriot	Sparks
Sawbonez		
Phoenix		

0m   4m   ∞

Selection

Pressing the Quick Ability 2 ('E') key will select the hand. The hand can be deselected by switching weapons or pressing the Quick Ability 2 ('E') key again.

<u>Note</u>: It only selects the glove and doesn't launch the Bionic Pulse.

Gameplay

- **Control**
    - o The Bionic Pulse behaves like a weapon. Players aim with the mouse and shoot the Bionic Pulse with the Fire ('Left Mouse') key.
- **Animation**
    - o Default State: Display the left arm as long as Guardian has the Bionic Pulse selected.
    - o Charged Pulse: Right hand holding left arm for support when player is holding fire to load up. Arm starts to shake
- **Single Pulse**
    - o Pressing the Fire ('Left Mouse') key once will emit a Bionic Pulse from the glove that revives downed team mates within a small range.
- **Charged Pulse**
    - o Holding the Fire ('Left Mouse') key will charge the Bionic Pulse.
    - o Releasing the Fire ('Left Mouse') key will emit a charged Bionic Pulse from the glove that revives downed team mates within a small range.
    - o Friendly players receive HP based on the charge up time of the Bionic Pulse
    - o The **Get Up!** Augment also applies to the charged pulse.

INCOMING DETECTION SYSTEM (IDS)

The Incoming Detection System is a passive ability that allows Guardian to identify airstrike and artillery locations to get her defensive ability ready before the air support is incoming. The location of incoming air support is communicated via **SFX** that highlights that something is incoming.

DEFAULT WEAPONS

Primary	Secondary	Melee
Hurtsall 2K	Hoigat .224	Batons

PHOENIX

OVERVIEW

Phoenix is a front-lines combat medic with a powerful healing potential unlike any other medic. He can jump into a group of allies and instantly restore a large portion of their health, which can turn the tides of combat very quickly. While he has great burst-healing potential, he lacks any major sustained healing, so he must time the use of his Healing Pulse well, or risk wasting it. He also has a unique self-revive ability, which allows him to revive himself without any help from his teammates or other medics – however it's on a lengthy cast time, so good positioning is highly important, so that he doesn't go down where he can easily be gibbed.

GOALS

- To introduce a medic designed to be fighting on the front-lines with their teammates.
- To introduce a Merc that can self-revive, meaning less reliance on other medics in matches.
- To introduce a medic that can heal allies instantly, as opposed to over-time healing.
- To implement a new method of healing which doesn't rely on teammates actively seeking out a health source.
- To expand on the 'World of Mercs' that Dirty Bomb offers, by introducing a Spanish Merc.

USER STORIES

- As a player, I want a medic that I can play on the front-lines with my other teammates.
- As a player, I would like a Merc that can revive themselves so that I don't have to rely on a second medic in my team.
- As a player, I want a medic that can burst-heal allies, as opposed to healing over time.
- As a new player, it frustrates me that my teammates won't move to where I place a healing item. I would like to be able to reliably give healing to my teammates around me.
- As a Spanish player, I would like to see my region represented within Dirty Bomb.

MERC DETAILS

Name: Phoenix (also known as Medic_03)
Nationality: Spanish

Role: A front-line Medic with powerful burst-heal capability. Also able to self-revive in combat!
Behaviour: Phoenix is a front-line Medic, who can quickly turn the tides of combat by instantly healing multiple allies at once, up to full health.

Body Type: Medium
Health: 100 HP
Max Sprint Speed: 430 units per second.
Eye Height: 77 units

PERSONALITY & BACKSTORY

When the Madrid Medical Council managed to get Phoenix struck off the medical register they thought that their biggest problem had been solved. Rather than his banishment acting as a punishment, Phoenix's expulsion from the medical community was freeing... after all, if everyone is mad at you already there's little else you can do to make it worse. Phoenix began researching nanite tech free of pesky regulations.

Phoenix's dermal regeneration tech ending up being more than skin deep, unexpectedly returning the recently deceased to life. Not only was Phoenix surprised at how effective this tech was; so was the (un)fortunate stabbing victim named Angel Ruiz who Phoenix used as a test subject.

With the possibility of his test subjects coming back to life and spreading word of what he was doing before he was ready to monetise it, Phoenix started experimenting on himself. Phoenix claims that he was trying to remove an unfortunate calf tattoo, but whatever he was doing he found himself down a leg. Luckily for Phoenix, Turtle already owed him a great deal of money, so he was able to get a replacement.

Word of Angel Ruiz's remarkable resurrection began to spread at an escalated rate through the Spanish criminal underworld, and Phoenix found himself bombarded with grieving criminal families wanting him to resurrect their long dead loved ones many of whom died in the uSERV riots of 1998. Unable to revive people who had been dead so long, Phoenix realised he would have to leave Spain for a while before he had to deal with some very angry mobsters.

HIS OWN WORDS...

"It is true I am the best. Why be coy? I shall not hide my light under a bushel. In any case, they do not make bushels the size of my talent. Understand well that I am absolutely the most effective combat medic working in the private sector today. It is not arrogance to tell the simple truth. Why do I rate myself so highly? Well, again, not to be coy, but I can bring myself back from the dead. Any further questions? No, I thought not.

Oh no, haha, that is not true. No, I am not THE resurrection, that is someone else. But one must admit, it is perhaps not a million miles away. Same ballpark. OK, perhaps one over. But still, bear it in mind, my friend. You are not dealing with any ordinary mercenary, or medic. And believe me, I shall be billing you appropriately."

Phoenix Character Quotes:
"I am concerned with your health, my wealth, and shooting people."
"I don't need you. You need me. There it is."
"Time of death, now. Cause of death, yours truly. I'm calling it!"

HEALING PULSE

Charging Healing Pulse

Phoenix can charge his Healing Pulse by holding 'Q' (Ability Slot 1) or by pressing '4' and holding the 'Fire' button. The longer that the Healing Pulse is charged, the more that it will heal. The maximum charge time for Healing Pulse is **1.5 seconds**.

While Healing Pulse is charging, a visible area-of-effect will be displayed to Phoenix, so that he can see who will be affected by the Pulse, and who will not.

> ⚠️ Phoenix cannot do any other function besides running and sprinting while Healing Pulse is charging – a visible charge animation should display this.

Releasing Healing Pulse

Releasing the charge button will cause Healing Pulse to take effect. All allies within his visible area-of-effect will be healed for the amount that the Healing Pulse was charged for.

Switching Weapons

If Phoenix switches weapons while Healing Pulse is charging, it should automatically release the Pulse as soon as he switches weapons. It should **not** negate the effect like an armed grenade.

DEFIBRILLATORS
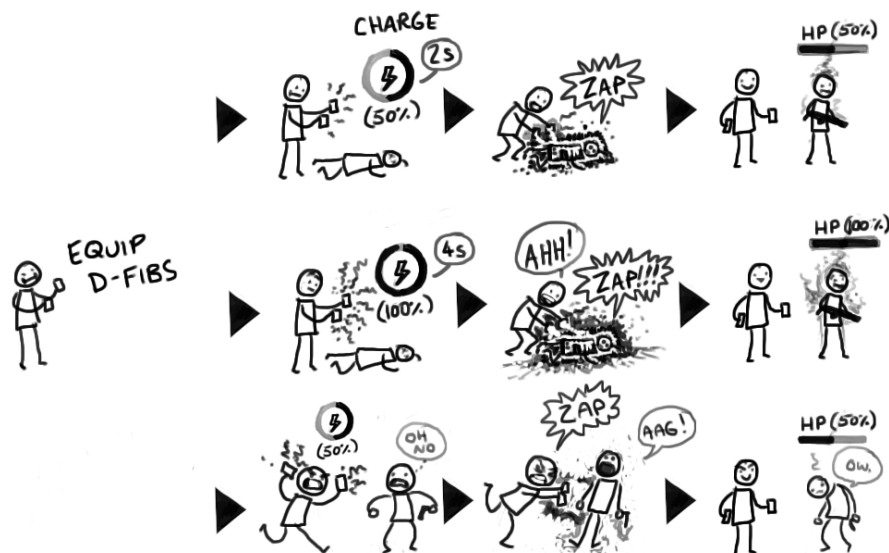
Charging Defibrillators

The Defibrillators can be charged by pressing and holding 'E' (Ability Slot 2), or by equipping the Defibrillators and holding the 'Fire' button. The longer that the Defibrillators are charged for, the more health an ally Merc will be revived for. While charging the Defibrillators, Phoenix will be restricted to the 'walk' movement speed.

> ℹ️ Defibrillators have a 'maximum charge' and will reach this point after

Defibrillating an Ally

An ally must be in range of Phoenix and the defibrillator to be revived. They can be aimed like any weapon and should be within approximately melee-range to affect a downed ally.

Reviving

Upon a successful revive, the ally will begin to rise to their feet. There is a short grace-period between being revived and being able to move. After this, the ally will have a brief period to spawn protection (to prevent them being instantly killed again upon being revived).

Note: A Merc's health on revive cannot be higher than their base health.

Offensive Defibrillators

The Defibrillators can also be used as a close-range weapon against enemy Mercs, dealing an amount of damage scaling off the charge. However, the slow movement speed while charging is restricted, so it can be quite risky to use them in a heat of combat.

ⓘ Defibrillators can also be used to gib downed enemies, like a melee weapon.

SELF REVIVE

Phoenix has the unique ability to self-revive himself if he is downed on the battlefield. It cannot be activated if he is gibbed.

Activating Self Revive

Self-Revive needs to be charged to be triggered. This can be done by holding the 'Use' button down downed. Once it reaches full charge, it will trigger the Self Revive.

Reviving

Upon a successful charge, Phoenix will begin to rise to his feet. There is a short grace-period between being revived and being able to move. After this, Phoenix will have a brief period to spawn protection (to prevent him being instantly killed again upon reviving).

⚠️ **Phoenix will always revive with full health from his Self-Revive**, because the context action acts as a 'full charge' of the Defibrillator.

DEFAULT WEAPONS

Primary	Secondary	Melee
Hochfir SMG	M9 Pistol	Beckhill Combat Knife

SAWBONEZ

OVERVIEW

Sawbonez is a hardened front-line combat Medic, with powerful regenerative healing for his allies. He has a fairly high health pool compared to other Medics, giving him a bit more survivability on the front-lines of the battlefield. He can keep even the highest HP Mercs topped up with health, and rush in to revive allies who are downed during combat.

GOALS

- To introduce a front-line medic that can heal their teammates while on the move.
- To introduce a combat Medic, capable of joining the fire-fight combat just as well as they can heal through one.
- To introduce a Medic that fits Dirty Bomb's run-and-gun gameplay.
- To create a Medic that is new-player-friendly and can be learned quickly.
- To expand the global 'World of Mercs' and introduce a Merc from a new region of the USA.

USER STORIES

- As a player, I want a Medic capable of providing powerful healing while on the move.
- As a player, I want a combat-focused Medic that allows me to be up-and-close in fire-fights with my teammates.
- As a competitive player, I want a Medic that suits the run-and-gun playstyle of Dirty Bomb.
- As a new player, I want a Medic that I can pick-up and play without any difficulty.
- As an American player, I would like to see Mercs from different regions of the USA.

MERC DETAILS

Name: Sawbonez (also known as Medic_01)
Nationality: American – USA

Role: A front-line Medic with a healing-over-time ability. A great pocket-medic for front-line heavy assault Mercs.
Behaviour: A good front-line combat medic, capable of keeping even the highest of health teammates topped up with health.

Body Type: Medium
Health: 110 HP
Max Sprint Speed: 410 units per second.
Eye Height: 77 units

PERSONALITY & BACKSTORY

Sawbonez knew from an early age he wanted to be a Doctor, there was something about putting his parachute-man action figure back together after dropping him out of windows that really called to him. Finding regular medical practice, a little too.... clinical he enlisted in the US Army. Whilst Sawbonez hated the rigid hierarchy of the army, there was something deeply satisfying about field medicine. He soon developed a reputation for insubordination...and saving lives. Sawbonez was constantly in trouble but the prosecuting officers found it hard to make charges stick. Since Sawbonez saved a lot of lives, he had a lot of friends all over the US military.

Eventually Sawbonez found himself under the command of William Ridely, a difficult officer who often found himself assigned the biggest troublemakers in the army. Ridley resented being stuck with the 'dregs' of the army and sought to get rid of them by assigning them to dangerous missions or test projects. Despite being sent on several of these missions Sawbonez unit always came back, largely due to his superb field medicine skills. Frustrated Ridely fabricated insubordination charges and sent Sawbonez to the local military hospital on cleaning duty.

Finding himself stuck in a clinical setting but barred from practising medicine Sawbonez befriended a young private who was waiting for a kidney transplant. Recognising the Private was unlikely to get his kidney in time, he snuck back into the military base, anaesthetised and stole a kidney from a visiting officer who had been taking part in a joint military exercise. Whilst he saved the Private's life, this was one step too far and the army finally had the grounds to dishonourably discharge Sawbonez. Sawbonez had little regrets as he was tired of the army. Thankfully so far Ridely hasn't figured out that Sawbonez is in London. Word is Ridely got booted out of the army and isn't above hiring Mercs to do his dirty work.

HIS OWN WORDS...

"As your physician, I advise you to take cover."
"Side effects may include lead poisoning, and incontinence."
"With one hand I save life, with the other I take it. Actually it's the same hand, but that don't sound as good."
"Aw, did you get a booboo on your behind? STAND UP AND FIGHT!"

"Call me Sawbonez. Call me "MEDIC!" Call me Sir. I don't care. Just sing on out, and I'll find you and heal you and get your back on your feet. No charge. Well, at least not at the point of treatment. The billing system is actually quite complex, but we don't need to go into that right now. Suffice it to say that there is no better combat medic for hire anywhere in the world, and there hasn't been in quite some time. I do not exaggerate for effect, I'm just telling you how it is.
You know what a battlefield is? It's where everything, EVERYTHING is there to hurt you. Bullets, grenades, mines, artillery, airstrikes, the cold hard earth itself, everything wants to kill you or take pieces out of you. You're going to need someone like me. And if you're lucky enough you'll get the actual, factual me, not just someone with the same loose job description. I'll run through bullets for you, drop the guy who dropped you, fix you up, get you back fighting. I'll drop Med Packs around you like goddamn scatter cushions to keep you healthy. I'll do whatever it takes to keep you alive and fighting. That's my calling. I take it kind of serious and personal. In return, I'd appreciate it if you don't shoot at me when I'm on your team. Do we understand one another? Good."

LARGE HEALTH PACKS

Throwing Large Health Packs

A Large Health Pack can only be thrown a very short distance, as they should be thrown to Mercs within proximity to Sawbonez.

Direct Hit

If Sawbonez gets a 'Direct Hit' with a health pack in an ally, it will provide a small bonus healing boost. This is to incentivise accuracy and not dropping health packs randomly throughout the map.

Dropped Health Pack

If a health pack doesn't directly hit a player, then it will remain on the floor until one of the following conditions is met:

- A Merc (friendly OR enemy) picks up the health pack.
- It has been in the world for x seconds.
- A 4th health pack is thrown – only 3 health packs from one player may exist in the world at any given point.
- The Sawbonez player switches Merc OR disconnects from the match.

Pick Up Health Pack

Once a Large Health Pack has been dropped, any Merc is able to pick it up (even an enemy Merc). The first Merc to touch the health pack, that also requires healing, will pick it up and have the healing effect applied to them.

Healing

The Large Health Packs apply a heal-over-time effect and will restore a Merc to full HP if they obtain the full effect. Health should regenerate quite rapidly on most Mercs.

Medics: Any Merc that has the ability to heal themselves (including Sawbonez himself) will have a slower effect from the Large Health Packs. They will still be restored to full HP, although it should take considerably longer than other Mercs.

> ⚠ If the player is shot while under the healing effect of a Large Health Pack, it will interrupt the healing effect and no further healing will be applied. (This is so that healing cannot be applied constantly while under enemy fire.

DEFIBRILLATORS
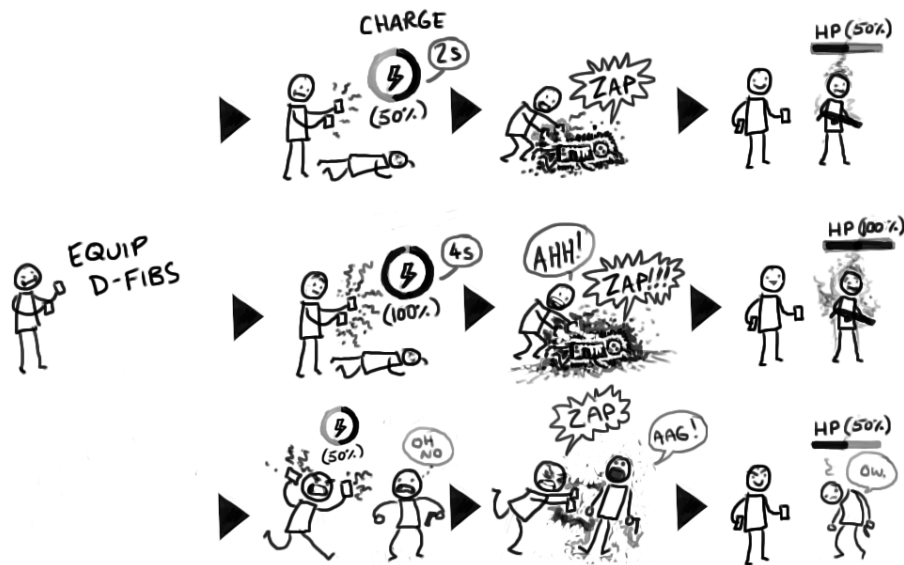
Charging Defibrillators

The Defibrillators can be charged by pressing and holding 'E' (Ability Slot 2), or by equipping the Defibrillators and holding the 'Fire' button. The longer that the Defibrillators are charged for, the more health an ally Merc will be revived for. While charging the Defibrillators, Sawbonez will be restricted to the 'walk' movement speed.

> ℹ️ Defibrillators have a 'maximum charge' and will reach this point after

Defibrillating an Ally

An ally must be in range of Sawbonez and the defibrillator to be revived. They can be aimed like any weapon and should be within approximately melee-range to affect a downed ally.

Reviving

Upon a successful revive, the ally will begin to rise to their feet. There is a short grace-period between being revived and being able to move. After this, the ally will have a brief period to spawn protection (to prevent them being instantly killed again upon being revived).

> **Note:** A Merc's health on revive cannot be higher than their base health.

Offensive Defibrillators

The Defibrillators can also be used as a close-range weapon against enemy Mercs, dealing an amount of damage scaling off the charge. However, the slow movement speed while charging is restricted, so it can be quite risky to use them in a heat of combat.

ⓘ Defibrillators can also be used to gib downed enemies, like a melee weapon.

DEFAULT WEAPONS

Primary	Secondary	Melee
SMG-9	M9 Pistol	Beckhill Combat Knife

SPARKS

OVERVIEW

Sparks is an aggressive long-distance Medic who can revive her allies from afar. Her Revive Gun is also great as a long-ranged weapon, capable of sniping enemy Mercs from the back-lines. She has limited healing capability because of her huge reviving potential, however she can use her Small Health Packs to top up allies who need a small health boost, or even pick them up herself.

GOALS

- To introduce a long-ranged Medic that doesn't rely on being up on the front-lines with the rest of the team.
- To introduce a Merc that excels more in reviving allies than healing.
- To introduce a Merc that makes use of the 'skill-shot' playstyle, rewarding players for good accuracy and timing.
- To expand the 'World of Mercs' to include more regions of the world and introduce a Russian Merc.

USER STORIES

- As a player, I want a long-ranged Medic that suits my long-distance play-style.
- As a player, I want to play a Medic that has more of a focus on reviving teammates, rather than being a raw healer.
- As a player, I would like a Medic that rewards me for good aim.
- As a sniper player, I enjoy skill-shots but often feel like a detriment to my team when I only play as a sniper.
- As a Russian player, I would like to see my region represented in Dirty Bomb.

MERC DETAILS

Name: Sparks (also known as Medic_04)
Nationality: Russian

Role: A long-distance Medic, able to revive allies from afar. She can also be an effective marksman.
Behaviour: Sparks hangs back from her team and revives them from a distance when they go down. Her health packs can keep her team sustained when a fire-fight gets tough but lacks a lot of healing potential. She can also deal high amounts of damage by picking off enemies with her Revive Gun.

Body Type: Skinny
Health: 80 HP
Max Sprint Speed: 470 units per second.
Eye Height: 68 units

PERSONALITY & BACKSTORY

The only thing known about Sparks' early life is that she was born in Russia, she probably had between zero and four siblings, and between one to three and a half parents. No one's sure, every time she's asked about her childhood she gives a different response. Sparks is just that convincing. MercSERV is aware of at least five other identities; the actual number is most likely far higher.

The REVIVR gun which Sparks carries is a prototype developed by Pirin Russia based on research original conducted in America, which has since been modified by Sparks herself. There are numerous rumours about how she got hold of it but the simplest is likely the closest to the truth. A Senior Pirin executive was known to frequent the local karaoke bar after work, and it is likely that the card was lifted whilst they were belting out 80s classics. An expert in impersonation, Sparks then walked into the facility and stole the tech. The embarrassed executive team at Pirin covered up the incident, blamed an American intern and firmly stuck their heads in the sand. Whilst Pirin have not publicly threatened Sparks (that would involve admitting culpability) privately they are still seething.

Sensing it was time to get out of Russia, Sparks headed for London on the recommendation of a friend. The barracks provided at MercSERV HQ for high earning Mercs are extremely secure, providing one of the safest places for a Merc will a price on their head to sleep.

HER OWN WORDS...

"You want to know about me. There is nothing to know. It is no concern of yours how I earned a living, doing what for whom. Oh get your mind out of the gutter. I am trained medical professional. And soldier. No one hired me to do filing. I am Angel of Death, not office temp. Although...well, what does office temping pay? More than killing people and saving lives? I thought not. Let me know if that changes, yes?"

Sparks Character Quotes:
"Call me Sparks. I heal. I kill. Is ironic paradox. Yadda yadda."
"Hello. I am Sparks. I bring you back to life. No, is not metaphor."
"Your medical skills briefly endear you to me."
"You're not as stupid as you look. But then, how could you be?"

REVIVE GUN

Equipping Revive Gun

The Revive Gun can be equipped like other wieldable weaponry, by pressing 'E' (Ability Slot 2) or by pressing '5'. Using the ability does **not** automatically fire the weapon – this must be activated separately by the player, by pressing and holding the 'Fire' button.

Shooting the Revive Gun

The Revive Gun requires a short charge before firing. Like the Defibrillators, the longer it is charged for, the more health it will revive for and the more damage it will deal.
It will fire when the 'Fire' button is released, causing a straight beam to fire from the gun. This will revive an ally or damage an enemy if they are hit.

Shooting A Downed Ally

When a downed ally is hit by Sparks' Revive Gun, they will be revived in a similar function to the Defibrillators.

⚠ A Merc can be revived with **30-100 health** – this scales based on how much the Revive Gun has been charged.

Note: A Merc's health on revive cannot be higher than their base health.

Shooting An Enemy

The Revive Gun is an effective ranged weapon too and can deal high amounts of damage to enemies.
⚠ The damage output scales based on how much the Revive Gun has been charged. It will deal **20-65 damage**, although deals double damage for a headshot.

SMALL HEALTH PACKS

Throwing Small Health Packs
A Small Health Pack can only be thrown a very short distance, as they should be thrown to Mercs within proximity to Sparks, or for herself.
Direct Hit
If Sparks gets a 'Direct Hit' with a health pack in an ally, it will provide a small bonus healing boost. This is to incentivise accuracy and not dropping health packs randomly throughout the map.

DROPPED HEALTH PACK

If a health pack doesn't directly hit a player, then it will remain on the floor until one of the following conditions is met:
- A Merc (friendly OF enemy) picks up the health pack.
- It has been in the world for 30 seconds.
- A 4th health pack is thrown – only 3 health packs from one player may exist in the world at any given point.
- The Sparks player switches Merc OR disconnects from the match.

Pick Up Health Pack
Once a Small Health Pack has been dropped, any Merc is able to pick it up (even an enemy Merc). The first Merc to touch the health pack, that also requires healing, will pick it up and receive 40 HP (up to their maximum HP amount).
Healing
The Small Health Pack provides instant healing, although only provides a set amount. It should give 40 HP upon pick-up.
Medics: Any Merc that can heal themselves (including Sparks herself) will receive slightly less healing from the Small Health Packs. They will only provide 30 HP to any Merc that falls into these criteria.

DEFAULT WEAPONS

Primary	Secondary	Melee
Tølen MP	Selbstadt .40	Beckhill Combat Knife

BUSHWHACKER

OVERVIEW

Bushwhacker is a skilled mechanic and engineer, who uses his own patented auto-turret in combat to set up crossfires and traps for his enemies. The turret acts like a great deterrent for unsuspecting Mercs, with its daunting presence and impactful suppressing-fire. His skills as an engineer allow him to arm and disarm C4 faster than other Mercs, as well as repair destroyed objectives much faster.

GOALS

- To include a defensive engineer that allows for locking-down chokes within a map.
- To introduce a Merc that is mechanically recognisable for a game like Dirty Bomb, while ensuring the character is unique.
- To ensure the Merc is straight-forward enough for a new player to understand and play competently without guidance.
- To expand the American Merc pool for different regions of the USA.

USER STORIES

- As a player, I want an engineer that allows me to set up in defensive chokes.
- As a player, I would like a Merc that is distinctly recognisable in their role that I might expect from a game like Dirty Bomb.
- As a new player, I want an engineer that is easily approachable and simple in design.
- As an American player, I would like a Merc from my own region that I can identify with.

MERC DETAILS

Name: Bushwhacker (also known as Engineer_02)
Nationality: USA – American

Role: Defensive combat-engineer.
Behaviour: Bushwhacker sets up strong defensive positions with his turret – catching unsuspecting enemies in the crossfire.

Body Type: Medium
Health: 110 HP
Max Sprint Speed: 410 units per second.
Eye Height: 76 units

PERSONALITY & BACKSTORY

Bushwhacker taught in the American public-school system for over a decade becoming a Master of Resource Management in the process. From 2008 the United States saw an unusually high number of natural disasters. The US government struggled to keep up with several businesses getting utterly destroyed in the process. Bushwhacker had invested heavily in several businesses that were effectively wiped off the map overnight. Since he'd already been considering a career change he made the leap and switched to Merc work, the fastest growing economic sector of the time.

After the CDA was established in 2015 the global response to the abnormally high rate of natural disasters improved, and the economy began to recover. Bushwhacker remained working as a mercenary, his highly effective transferable skills make him a force to be reckoned with both on the field and off. He's not keen on the CDA after being distinctly unimpressed with their handling of the growing global situation. Still Bushwhacker has worked for unsympathetic clients before, and after dealing with hordes of bored teenagers he can handle anything that's thrown at him.

HIS OWN WORDS...

"Anything mechanical I can fix up. Or, you know, utterly destroy. Depends, don't it? To everything there is a season. Circle of life. Big picture. You dig?"
"I've chawed an' spat things made more sense than you."
"I kill your sorry ass, not a court in the land would convict me. They'd carry me out on their shoulders, cheerin' and whoopin'."
"Aw that's good. Or clever. Or brave. Or interestin'. Or whichever you thought it was."

"I'm what you'd call a combat engineer, being that I do the odd bit of construction and repair and fixing and making and technologizing, all the while in the near proximity of people shooting things at me. I don't know why that is, I must have said something to rile 'em, I guess. Perhaps it's the hair. Anyways, I find I do my best work under pressure, and believe me, nothing focuses the mind like incoming fire. You ever played quarterback? I imagine it's something like that, only with more, you know, gunfire. Although I dunno, it's been a while since I saw a game, maybe they do that these days too."

DEPLOYABLE TURRET

Placement

When the Deployable Turret is off cooldown, Bushwhacker can place it at any time. The placement toggle can be activated by holding 'Q' (Ability Slot 1) or pressing '4', and a hologram/wireframe of the Turret will be shown to Bushwhacker. This will help display to the player, where the Turret will be placed upon confirming. To indicate that the turret can be successfully placed, the hologram will display in **blue**.

> ⚠️ **Important:** *The Turret will always face away from Bushwhacker's position, meaning that it will look in the direction that he is looking, when placed.*

Deploying

To confirm deployment, the player should release the 'Q' key or press the 'Fire' button to confirm. This will place the Turret wherever it is currently aligned.

Upon deploying the Turret, it has a short set-up period before it can begin firing at enemy Mercs.

> ⚠️ **Unable to place:** Some areas should not allow the Turret to be placed (to ensure no clipping issues occur). In this instance, the Turret's hologram turns **red**.

Deployed

The Turret will aim in a 180-degree arc from its facing position. Any Merc that comes into line-of-sight within this arc will be targeted – however, once locked on, it can rotate 360 degrees to track the Merc. Once the Merc is downed or out of line-of-sight it will return to its original facing position and 180-degree view.

- Closest Merc is targeted first.
- HOWEVER, the Merc targeted should not change until the original targeted Merc is downed, or out of line-of-sight.
- There is a short "lock-on" period before the Turret will damage a targeted enemy Merc.
- Turret cannot headshot its target.

Reclaimed

Bushwhacker can reclaim his Turret to reposition it, at any time. Reclaiming the Turret is instant once selected to do so.
The amount of cooldown returned, upon reclaiming the Turret, scales to the amount of HP the Turret has left.

Example
- A 100% health Turret will return **65%** of the cooldown.
- A 50% health Turret will return **32.5%** of the cooldown.

Note: *65% is the highest cooldown return possible.*

Destroyed

Bushwhacker's Turret only has 120 HP, so it can be destroyed by enemy Mercs.

⚠️ Upon being destroyed, the Turret should display a *destroyed-state* animation, before sinking down and being 'destroyed'.

OBJECTIVE SPECIALIST

The "Objective Specialist" is a passive effect on Engineers which allows them to complete objectives twice as fast as other, regular Mercs. This includes repairing an objective, as well as arming and disarming C4.

DEFAULT WEAPONS

Primary	Secondary	Melee
KEK-10	M9 Pistol	Beckhill Combat Knife

FLETCHER

OVERVIEW

Fletcher is an aggressive front-line combat engineer, who has a lot of close-range fire-power at his disposal. He has his Sticky Bombs which can deal a lot of damage to his foes when caught in multiple explosions or stuck to other Mercs. He is a master at 1-on-1 combat and can engage other Mercs fiercely in confined spaces. Fletcher is also able to complete objectives faster than most other Mercs, as he is a highly-trained Objective Specialist.

GOALS

- To provide players with a more aggressive and front-line alternative for an engineer.
- To provide a Merc with a higher skill-ceiling than some of the previously released Mercs.
- To expand the 'World of Mercs', with an addition from the continent of Africa.
- To provide a Merc with a personality and style, more unconventional to other Mercs within the Dirty Bomb universe.
- To include a new Merc whose ability greatly rewards timing and skilful aim.

USER STORIES

- As a player, I want an engineer that plays more aggressively as an attacker, as opposed to primarily defensively.
- As a player, I would like a Merc with more depth and complexity than some of the other existing Objective Specialists.
- As an African player, I would like to see my audience represented more within Dirty Bomb.
- As a player, I want to see Mercs with a wide range of personalities.
- As a competitive player, I want to see Mercs with abilities that reward good timing and skilful aim.

MERC DETAILS

Name: Fletcher (also known as Engineer_03)
Nationality: Nigerian

Role: Close-range combat-engineer with highly offensive abilities to make aggressive pushes.
Behaviour: Fletcher is an aggressive combat engineer that has to engage his enemies in close proximity. He can lay traps and lock down entire areas of the map if played well.

Body Type: Medium
Health: 110 HP
Max Sprint Speed: 420 units per second.
Eye Height: 76 units

PERSONALITY & BACKSTORY

Fletcher made a name for himself in Nigeria designing and selling state of the art bespoke weaponry. Whilst his firm's output wasn't massive, his weapons were highly sought after by Mercs around the world.

After growing his business as far as he could domestically he sought to expand his business. He approached British firm CoreSEC intending to pitch a joint enterprise. The firm rejected his offer and were extremely insulting about the quality of his work. After returning home, Fletcher's headquarters were broken into and the plans for several prototype weapons were stolen. Whilst none of his employees were hurt, they reported the facility being filled with an unusually dense smoke grenade. Several employees also mentioned seeing a bright red light just before they were knocked out. Immediately suspecting CoreSEC Fletcher left his family behind and returned to the UK to investigate.

Whilst Fletcher's CoreSEC contact denied any involvement, Fletcher wasn't convinced. Fletcher made enquiries (some discrete, some violently direct) and discovered that weapons based on his designs were indeed being used in London. Due to his excellent reputation he was easily able to get a referral to MercSERV. He arrived at the MercSERV Greenwich campus and completed the enrolment test, intending to use his MercSERV status to gain access to the London contaminated zone where it was rumoured several arms firms including CoreSEC were running secret tests. On his third mission his team was ambushed whilst escorting an EV. When Fletcher witnessed the area get obscured with smoke he spotted a piercing red light he realised he'd found the Merc who had robbed his factory....

HIS OWN WORDS...

"Time is money. Time is luck. Money is nice. It's nice to be nice. Today is a good day for you. Today is a good day for you because you get to meet me, and I offer you my services and I am the best, the best by a long chalk. I have dedicated myself, my mind, my body, my not inconsiderable force of character to becoming the very best, greatest, most vital, most expert combat engineer in the world. This is an acknowledged truth. The world over, they know this is true. Do yourself a favour. Do yourself several favours at once. By hiring me you will gain the benefit of my expertise, talents, skills, bravery and vigour. Your enemies will see me and flee. They know I am The Difference. I am Inevitable. Which is why I have to charge just a little bit more. Or they would hire me. And you do not want that, do you? Oh very much no."

Fletcher Character Quotes:

"Here is what I will do for you. I will fix and repair things very fast. And I will shoot enemies with my shotgun. And I will plant sticky bombs. And this is why I am your best friend."
"You get what you pay for. I am the best. So I cost more. This is natural."
"You are still alive. But even a stopped clock is right twice a day".

STICKY BOMB

Functionality

Fletcher has 3 Sticky Bombs at his disposal. They a significantly lower damage than other explosives but deal more damage to enemies they are 'stuck' to. This encourages Fletcher players to practice good aim and timing to land their Sticky Bombs on other Mercs for maximum impact.

Throwing A Sticky Bomb

Sticky Bombs are thrown in an arc, and thus are relatively short ranged. They will stick to the first surface they come into contact with – this includes other Mercs.

⚠️ **Note:** *Sticky Bombs should NOT stick to any objectives. This includes the EV, carriable objectives and generators, as well as any others.*

Clearing Sticky Bombs

Sticky Bombs should remain in the world until detonated, **OR** one of the following conditions is met:

- Fletcher is gibbed (being in capped does NOT count).
- Fletcher player switches to another Merc.
- Fletcher leaves the match.
- The Merc with a Sticky Bomb stuck to them is gibbed or respawns.
- The Merc with a Sticky Bomb stuck to them leaves the match.

DETONATOR

Activating the Detonator

Pressing 'E' (Ability Slot 2) will activate the Detonator, quickly. These will detonate ALL Sticky Bombs that Fletcher currently has in the world.

⚠️ For Fletcher to detonate one Sticky Bomb at a time, he must throw one, then detonate, then throw another.
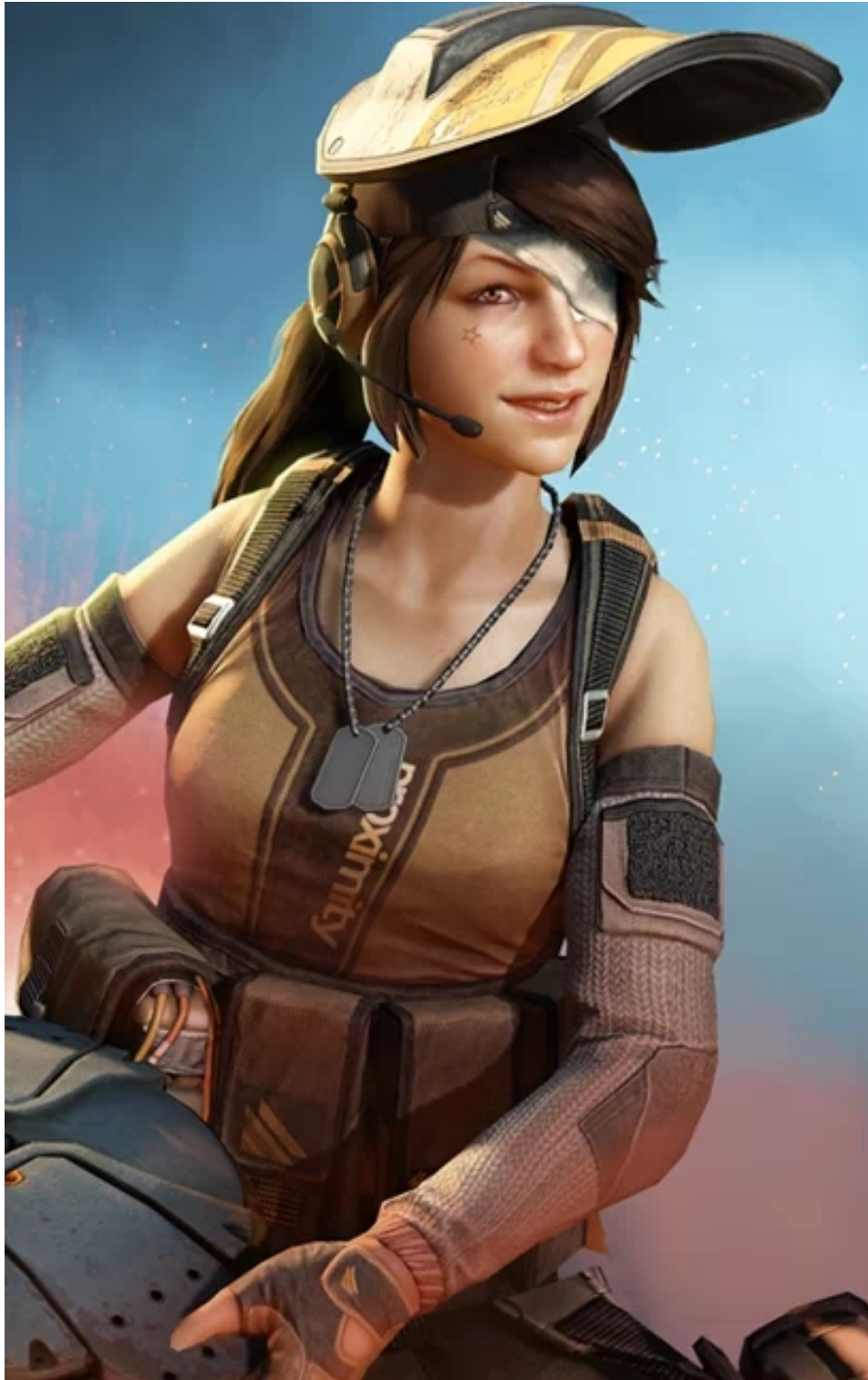
OBJECTIVE SPECIALIST

The "Objective Specialist" is a passive effect on Engineers which allows them to complete objectives twice as fast as other, regular Mercs. This includes repairing an objective, as well as arming and disarming C4.

DEFAULT WEAPONS

Primary	Secondary	Melee
Ahnuhld-12	Empire-9	Beckhill Combat Knife

PROXY

OVERVIEW

Proxy is a close-quarters Objective Specialist, who specialises in laying traps with her Proximity Mines, for her unsuspecting foes to run into. She is equipped with shotguns or an SMG to emphasise her close-range play-style. She is light-on-her-feet and ready to knock Mercs out with her handy Cricket Bat. What she lacks in health, she more than makes up for in speed and fire-power!

GOALS

- To create a Merc that caters to the fast-paced play-style of Dirty Bomb – allowing players to approach objectives quickly.
- To cater to all different play-styles by providing an easy to pick-up-and-play Merc, with compelling and fast-paced gameplay.
- To include hardened female characters to fit in with the 'World of Mercs' that Dirty Bomb will deliver on.
- To provide a Merc that is fast on their feet and an expert in close-quarters combat, for fast-paced and tight gameplay.
- To provide a Merc that has the capability to set up traps on the battlefield.

USER STORIES

- As a player, when playing an objective specialist, I want to storm the objective as fast as possible to get the plant – speed is the best tool.
- As a new player, I want a Merc that I can pick up and play with ease.
- As a player, I want a cool and combat-competent, strong female Merc.
- As a player, I would like a close-quarters combat and fast Merc to suit my quick play-style.
- As an old-school arena-shooter player, I want a Merc that can move fast and shoot fast.
- As a player, I want to be able to set traps for my enemies.

MERC DETAILS

Name: Proxy (also known as Engineer_01)
Nationality: British – English

Role: Speedy and defensive Objective Specialist
Behaviour: Proxy can rush in and complete objectives faster than any other Merc. Her speed is her X-Factor.

Body Type: Skinny
Health: 90 HP
Max Sprint Speed: 450 units per second.
Eye Height: 68 units

PERSONALITY & BACKSTORY

Proxy grew up in a world already staggering under the pressure caused by the increasing frequency of natural disasters and fierce competition for natural resources. She joined the British Army straight from secondary school, but she saw no active service. The British government had by then expanded its use of PMCs and was slowly pulling funding from the British army. Disenchanted with her time in the army she moved back home to her parents' home in London whilst she pondered her next move.

When the Dirty Bomb event occurred, she swiftly sealed all the doors and windows of her parents' flat, improvised a safe air supply using their vacuum cleaner's HEPA filter and then jerry-rigged a car-wash to act as emergency decontamination facility. When the CDA finally arrived to evacuate her family two days later they found the family much healthier than their less fortunate neighbours.

Instead of being evacuated with her family Proxy stayed behind. After encountering some of her old military friends working Merc contracts as part of the evacuation Proxy saw her chance to finally see some action. Whilst her parents were evacuated Proxy stated behind and registered for MercSERV. In April 2021 Proxy was hired by fashion designer Max Bashki for what was supposed to be a simple job. Due to a mix up, Proxy ended up taking out Bashki instead of the real target, his bodyguard Aimee. Aimee tracked Proxy down and, in a fury, took out one of Proxy's eyes. Thankfully for Proxy, Turtle arrived not long after and outfitted her with a fancy new replacement.

HER OWN WORDS...

"If you were twice as good, you'd be half as bad, but you're not."
"I'd tell you what I think of you, but there aren't enough asterisks in the world to print it."
"Shotgun! I call Shotgun! Because I have a...um...shotgun."
"Me? I was born ready. What about you?"
"Top of the morning to ya."
"Move your Arse, come on!"

"So I joined straight from school, learned all my trades in the service, mechanical/electrical/electronic engineering, Explosive Ordnance Disposal - that's bomb defusing to you - mining and mine-clearing, everything from pliers-and-wires jobs to laying explosive charges, anywhere, anytime, unobserved or under enemy fire. Best job in the world, innit? Trouble is, by the time I joined up, everything was calming down. All my training Sergeants were telling me what it would be like when I was out on active duty and then...there wasn't any.

All that training, all that expectation - "How would I react under fire? Could I do the job under pressure? Would I let my unit down? How much use would I be when things got real?" - all that just...went away. I mean, I know, I know, war's a terrible thing, not an adventure playground for the likes of me. I just had to get out and do what I'd trained for. And it turned out that my regiment, the regular army, wasn't the place to do that. So I served out my term, went private, ended up working alongside a lot of old boys and girls from units I recognised, and got to put my skills to use. And it's great. It can be scary, sure, when the lead starts flying, but you have a job to do so you do it. I don't bother with the long-range shooting, that's someone else's department. But up close, you can't beat a shotgun. Or at least, you can try. It just doesn't go so well for them that do. Stay light, move fast, carry a big old shotgun and a landmine or two, does the trick every time."

PROXIMITY MINE

PROXIMITY LAND MINE - FL-PALM 9

A Proximity Mine will detonate when an enemy Merc stands within the detection radius. They can also be detonated by receiving damage. Proximity Mines will create a large, impactful blast and are designed as area-denial tools for Proxy, while she attempts to lock-down areas for the objective.

⚠️ **Important:** *A Proximity Mine will not detonate automatically until armed*

Throwing a Proximity Mine

Proximity Mines should be dropped a short distance in-front of Proxy when deployed. They should not be throwable for much of a distance, due to them being designed as traps, as opposed to offensive grenades or explosives.

Arm-Time

After being placed, the Proximity Mine will take a moment to arm. It will not explode (unless shot or damaged) before this arming period is complete. Once it is armed, it will act as intended and detonate when an enemy Merc comes into range.

OBJECTIVE SPECIALIST

The "Objective Specialist" is a passive effect on Engineers which allows them to complete objectives twice as fast as other, regular Mercs. This includes repairing an objective, as well as arming and disarming C4.

DEFAULT WEAPONS

Primary	Secondary	Melee
Hollunds 880	MP 400	Cricket Bat

TURTLE

OVERVIEW

Turtle is an expert engineer. He built his own robotic arm – with one hand – he's *that* good. He specialises in defensive positioning for his team, with his Shield Generator he can lock down entire areas of a map.

GOALS

- To introduce a more defensive engineer.
- To provide a Merc that has a big team-utility focus.
- To provide a Merc with a high skill ceiling, but low skill floor, so that new and pro players alike can play him effectively.
- To expand the 'World of Mercs' and their diversity, with a Merc from Turkey.

USER STORIES

- As a player, I would like to be able to cover myself when completing an objective.
- As a player with poor aim, I would like a Merc that allows me to be effective and help my team, without being overly combat-reliant.
- As a competitive player, I want a Merc that's simple in design, but complex to master.
- As a Turkish player, I want a Merc that I can identify with in the game.

MERC DETAILS

Name: Turtle (also known as Engineer_04)
Nationality: Turkish

Role: Turkish combat engineer Turtle can deploy his Shield as cover to protect his teammates while they complete objectives or get revived by friendly medics. It's a perfect counter to campers and snipers with over-watch of the objective. He can also use his shield as a defence of his own: he can't block routes, but he'll block bullets!

Behaviour: Turtle is relaxed and slightly slobby. He might scratch himself, fiddle with his robotic arm, flexing metal fingers experimentally or scratching some dirt off the smooth surface of the metal arm with his real hand.

Body Type: Medium
Health: 110 HP
Max Sprint Speed: 410 units per second.
Eye Height: 76 units

PERSONALITY & BACKSTORY

Turtle often speaks fondly of his time at Istanbul University, but no one can find any evidence he actually studied there. So either he attended but had his attendance records deleted, he dropped out, he simply showed up for the lectures without enrolling, or he's flat-out lying. You try asking him, you'll get nothing out of him other than a warm smile and a thoughtful flexing of his servo-motors.

It's still not clear how Turtle lost his arm. Again, the rumours abound: simple accident, experiment gone wrong, sabotage or, alas, it's not impossible the injury was inflicted as a sinister "friendly" warning/reminder to "stay away from the arms business". Certainly there are many stories of Istanbul mobsters meeting with oddly specific debilitating injuries in the years that followed but the plural of anecdote is not data.

Phoenix claims to have saved Turtle's life, but it's not clear when. Certainly Turtle has paid him large amounts of money over the years, but it's not clear in return for what. They certainly worked together before London. The first concrete data on Turtle's Merc career can be found in the records of data from PMCs acquired by MercSERV that date from the mid-2000s. Records show that a mission to acquire an experimental weapon on behalf of a Spanish cartel didn't go as planned, the weapon was accidentally detonated and Turtle was caught in the explosion. Was his original arm destroyed on that occasion? Is that state-of-the art prosthetic the one he made himself, literally single-handedly? Surely not. Right? So why did Turtle initially decline to take part in the MercSERV enrolment process? How was he eventually 'convinced' by Phoenix to complete the process and take on a mission for Jackal in the London contaminated zone? Is he hiding from someone? Is he hunting someone? He's not telling.

HIS OWN WORDS

"I am Turtle. I provide you with portable cover, save your life. Is no big deal."
"Like my arm? I made it myself. One-handed. Yes, I am THAT good."
*"I'm Turtle. Want to arm-wrestle? No? Best of three?"*
"Fame comes at a price. For you, it is a 50% reduction for being such an asshole."
"I kill five of you, who are now dead, and yet I remain alive. You see my point?"

"Yes, I have a robotic arm. Yes I made it myself. No, I did not remove my original meat arm to install my new arm. No I do not want to talk about it. What happens between a man and his three arms is personal. I advise you to relax. Smoke a pipe. It will make you appear calm. If you have not virtue or wisdom, then acquire and practice their outward signs. Or wear dark glasses. Most people seem to think that works for them. Are you still here talking to me? Is it about fixing something? Is it about shooting something? Those are the limits of my interests with you, I shall be honest."

SHIELD GENERATOR
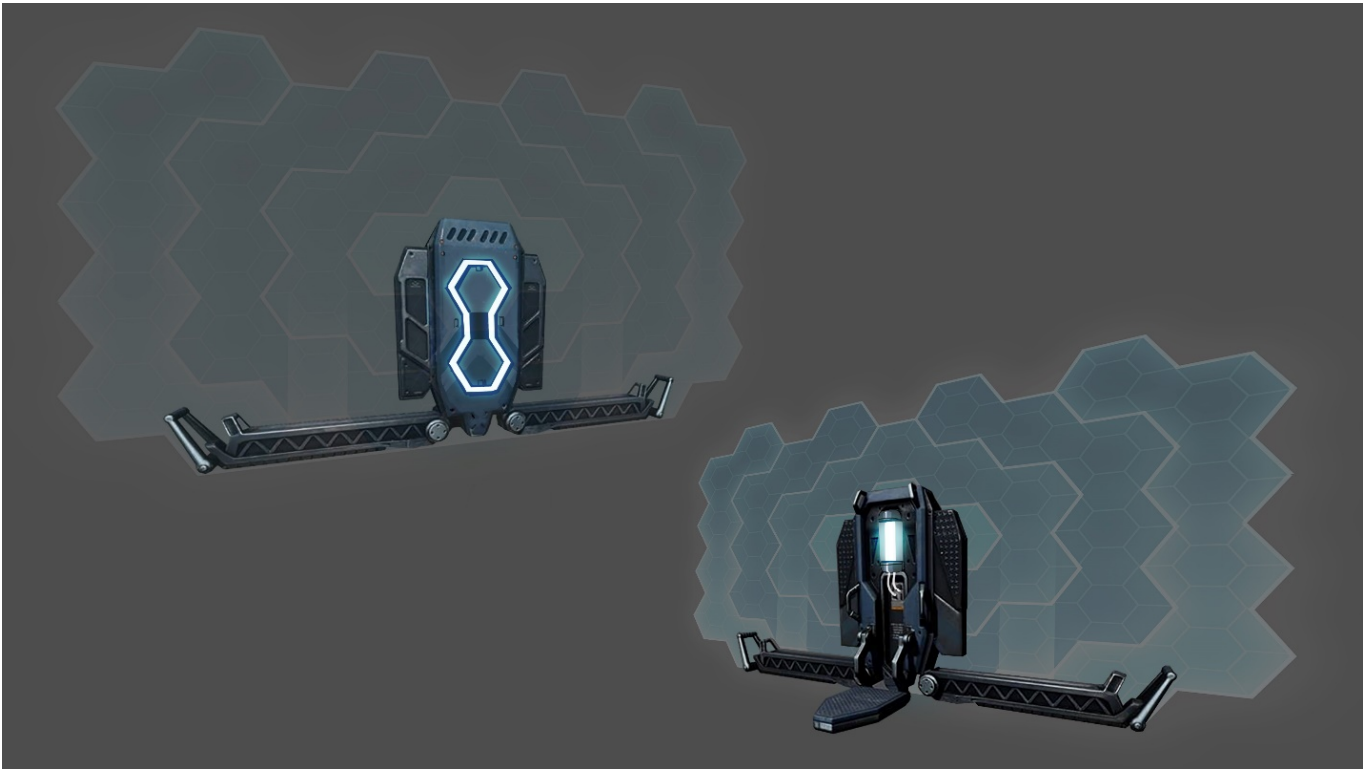
The Shield Generator is Turtle's Primary Ability. When deployed it protects his team by blocking incoming damage and projectiles.

The Generator itself is roughly the size of a Proxy mine and does not block player movement. When placed, an Energy Wall will be deployed in front of the Generator requiring enemies to walk around the Energy Wall to destroy the Generator. The process of generating the wall takes several seconds (like proxy mines). The generated wall is slightly taller than a player and roughly twice as wide as it is tall.

Barrier

The Shield Generator acts like a **barrier** to weaponry and explosives, although it allows Mercs to freely walk through it. The shield should block:

- Bullets
- Projectiles
- Explosive Damage

It should only block damage/projectiles for the enemy team (i.e.. Turtle's own team's bullets and projectiles will travel through the shield). This will reduce team frustrations and allows for tactical positioning to be used.

Generator

The generator itself (the physical component) has much less health than the barrier. It is covered by the barrier from the front, although the enemy can flank the Shield Generator and take it out easily from behind. This acts like a **weak point** for a tactical approach for dispatching a Turtle.

> ⚠ The destruction effects for the Shield Generator should be new, so that players can recognise what deployable has been destroyed.

Damaging the Shield

Shield Hit Feedback:
- Hit Indicator - *The regular hit indicator from a shot fired is displayed on the Shield's surface.*
- Impact VFX on the Shield - *A small visual VFX on the Shield's surface should display that the shield has been hit in that location.*

Shield Health Feedback:

- 'Glitch' Effect - *The lower in HP that the Shield currently is, the more intense the 'glitching' effect of the Shield is.*
- Pulse Rate - *The Shield pulses slowly at high health, and pulses much faster at lower HP.*

Reclaimed

Bushwhacker can reclaim his Turret in order to reposition it, at any time. Reclaiming the Turret is instant once selected to do so.

The amount of cooldown returned, upon reclaiming the Turret, scales to the amount of HP the Turret has left. eg.

- A 100% health Shield will return 65% of the cooldown.
- A 50% health Shield will return 32.5% of the cooldown.

   Note: *65% is the highest cooldown return possible.*

Merc Ability Interactions

- **FF off** - Player abilities cannot damage the Shield or the Generator. All negative effects like Blinds/Stuns are blocked by the Shield.
- **FF on** - Player abilities cannot damage the Shield BUT can damage the Generator. All negative effects like Blinds/Stuns are blocked by the Shield.

Merc	Interaction with Friendly Shield	Interaction with Enemy Shield
Aimee	SNITCH device can be thrown through the Shield and darts also go through the Shield	SNITCH device bounces off the Shield. The darts are also blocked by the Shield
Arty	Friendly Artillery Targeter aims through the Shield	Artillery Targeter should trace to the shield, rather than through it
Aura	Friendly Heal Station heals through the Shield	Heal Stations are not healing through the Shield. Defibs are handled like melee weapons - damage Shield & can revive through it
Bushwhacker	Turret locks on the enemy and fires at him (does damage)	Turret locks on the enemy and fires at him (only damage to shield)
Fletcher	Sticky bombs can be thrown through the Shield. The damage is blocked by the Shield.	Sticky Bombs bounces off the shield
Fragger	Frag Grenade can be thrown through the Shield. The damage is blocked by the Shield	Frag Grenade bounces off the shield
Javelin	Rockets fly through the Shield. The Rocket damage is blocked by the Shield	Rockets explode on impact
Kira	Normal Orbital Strike behaviour. Ammo Station provides ammo through the Shield	Normal Orbital Strike behaviour. Ammo Station doesn't work through a Shield.
Nader	Grenades go through the Shield. The damage is blocked	Grenades explode on impact
Phantom	The EMP is not affecting the friendly Shield	EMP disables the enemy shield
Phoenix	Phoenix can heal friendly players through the Shield	Heal blocked by the shield. Defibs are handled like melee weapons - damage Shield & can revive through it
Proxy	Mines can be thrown through the Shield but friendly damage is blocked by the Shield	Mines bounce off the shield
Red Eye	Enemies can be spotted easily through the friendly shield.	Enemies are harder to spot behind the shield, because of the increase in opacity
Rhino	Bullets go through the Shield	Bullets are blocked by the Shield
Sawbonez	Medpacks go through the Shield	Medpacks bounce off the shield
Skyhammer	Airstrike Marker can be thrown through the Shield	Airstrike Marker bounces off the shield
Sparks	REVIVR shot goes through the Shield	REVIVR shots blocked by the shield
Stoker	Molotov can be thrown through the Shield. Damage gets blocked by the Shield	Molotov explodes on impact. Ammo Station is not providing ammo through the Shield
Thunder	The Concussion Grenade flies through the Shield but all effects are blocked by the Shield	Grenade bounces off the shield and all effects are shielded
Vasili	Device can be thrown through the Shield	Device bounces off the shield. Tracking people through the Shield

OBJECTIVE SPECIALIST

The "Objective Specialist" is a passive effect on Engineers which allows them to complete objectives twice as fast as other, regular Mercs. This includes repairing an objective, as well as arming and disarming C4.

AUGMENTS

Augments that affect the Shield Generator

- **Extender** - Extends the size of the shield.
- **Steady** - Increases the HP of the shield and generator by 20%

DEFAULT WEAPONS

Primary	Secondary	Melee
SMG-9	Smjüth & Wetsman .40	Stilnotto Stiletto

ARTY

OVERVIEW

Arty takes no nonsense. For him, it's all about the pay-out. Give him a job, and it gets done – in exchange for a fair fee. His Artillery Strike is a devastating weapon, capable of dealing massive damage in an area-of-effect on the battlefield, however he is limited to outdoor use. He can use it offensively and defensively, and can provide his team with the extra support they need... More ammo! All you need is enough fire-power to fill the air with bullets.

GOALS

- To introduce a support Merc that specialises in support and combat.
- To provide a core role in the team composition of Dirty Bomb with supplying ammo to teammates.
- To provide a Merc that has an aim-based alternative for Air-Support.
- To introduce a longer-ranged Fire-Support Merc.
- To expand Dirty Bomb's 'World of Mercs' and include a Chinese nationality Merc.

USER STORIES

- As a player, I would like to play a support role with more of a combat focus too.
- As a team-player, I want to ensure my team never runs out of ammo and has to fall back because of it.
- As a player, I would like a more aim-based Fire-Support Merc.
- As a player, I want a long-ranged Fire-Support that can hang back and support teammates from afar.
- As a Chinese player, I would like to see my region represented in Dirty Bomb.

MERC DETAILS

Name: Arty (also known as FieldOps_02)
Nationality: Chinese

Role: Offensive Fire-Support
Behaviour: Arty is a combat-heavy fire-support, who can provide his team with ammo and rain explosives down on his enemies.

Body Type: Medium
Health: 120 HP
Max Sprint Speed: 400 units per second.
Eye Height: 77 units

PERSONALITY & BACKSTORY

Prior to working in London Arty completed a number of high profile defence contracts in South America, India and Germany. When uSERV launched its MercSERV subsidiary, he became attracted by its flexible working conditions and lack of questions. He likely has a few friends at MercSERV as there are no records of his early enrolment tests.

Very few of the PMCs Arty worked for prior to his work at MercSERV still exist. All have suffered mysterious accidents. It is unclear if Arty is to blame or if someone is targeting him. Arty sure isn't talking.

Arty frequently travels back to China, often with suitcases full of gifts. Little else is known about where he goes as he takes enormous pains to cover his tracks. He makes a point of not getting involved in another people's business, presumably so they don't get involved in his. He shows up, gets the job done and clocks out.

HIS OWN WORDS...

"Call me Arty. And stay out my way, OK? Dangerous for you."
"Fight fight fight, work work work, all I ever do..."
*"Who's capturing the Objective? Arty! AGAIN!"*
"Arty. I got friends in high places. Make you dead, eh?"

"Artillery is the god of the battlefield. You know who said that? Never mind. I did. Just now. You call that a gun? I got guns you can't even pick up, they're so big. I got guns so big, I can't even carry them with me. I got guns so big, it takes a whole crew to aim and reload them. But it only takes me to fire them. Me and my little pointy laser here. So you shoot at me all you want. Bang bang, all the time. I just shoot you once with my guns, you'll know all about it, OK? Fire from the sky. God of the battlefield, remember? Good. Don't you forget.

I carry around bullets for you. How about that? I don't have enough to think about, I'm carrying extra ammo for YOUR gun. AND I'm looking for targets, designating them with pointy laser, engaging them with top quality artillery fires, and I'm doing all that carrying YOUR ammo. You'd think people would be more appreciative but no. I tell them to get down, or get out the way, it's for their own good, I save their life but they want "please" and "excuse me" and "oh I beg your pardon would you mind". I have no TIME for this. I have things to do! Can't wait around!"

ARTILLERY STRIKE
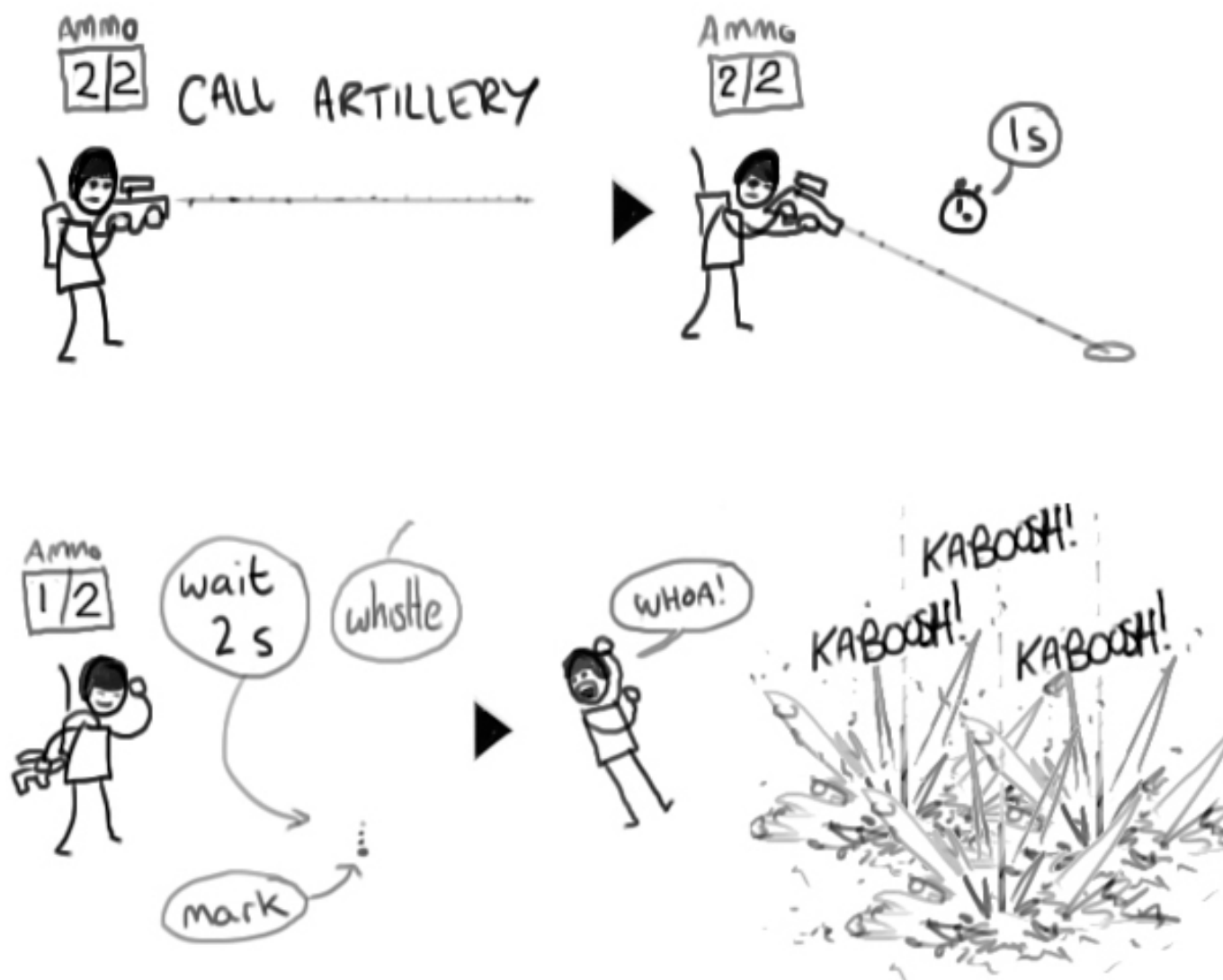
Targeting

Arty can quickly equip his Artillery Strike Targeter and automatically fire with 'Q' (Ability Slot 1) or by pressing '4' and manually firing with the 'Fire' button. A laser target will appear to indicate where the Artillery Strike marker will be placed – it must remain targeting a location for a short time, in order to place the marker.

⚠ If the laser target becomes misaligned, then the charge will have cancelled, and the Artillery Strike must be re-targeted.

Marker Placed

Once a marker has been placed there will be a visual indicator (a **red** dot marker – **blue** for allies) to display where the Artillery Strike will land. There will be a short delay before it is deployed and lands, so that it gives enemy Mercs a reasonable time to evade.

Artillery Strike

When the Artillery Strike lands, it will create **3** large explosions within the area-of-effect.

- 3 random locations are selected within the AoE.
- Trace lines are drawn to these locations.
- Players get direct damage on the trace lines and radial damage that gets triggered from each trace line.

The Artillery Strike is designed to be a high impact, but very slow firing area-denial weapon. All Mercs caught within the AoE should be downed and gibbed, due to the amount of heavy impact damage and large radial damage.

AMMO PACKS

Throwing Ammo Packs

Arty can quickly throw an Ammo Pack by pressing 'E' (Ability Slot 2), or by pressing '5' he can equip them and throw then with the 'Fire' button.
⚠️ *Ammo packs can only be thrown a short distance. They are designed to be dropped or given to Mercs nearby.*

Picking Up Ammo Pack

If a Merc picks up an Ammo Pack it will restore their ammo count to **maximum capacity**.
⚠️ *Ammo Packs can be picked up by any Merc – even Mercs from the enemy team. This encourages careful placement of Ammo Packs, so that the enemy doesn't pick up Ammo that's left behind.*

Ammo Pack Direct-Hit

If Arty throws an Ammo Pack at an ally it will reduce their ability cooldown.
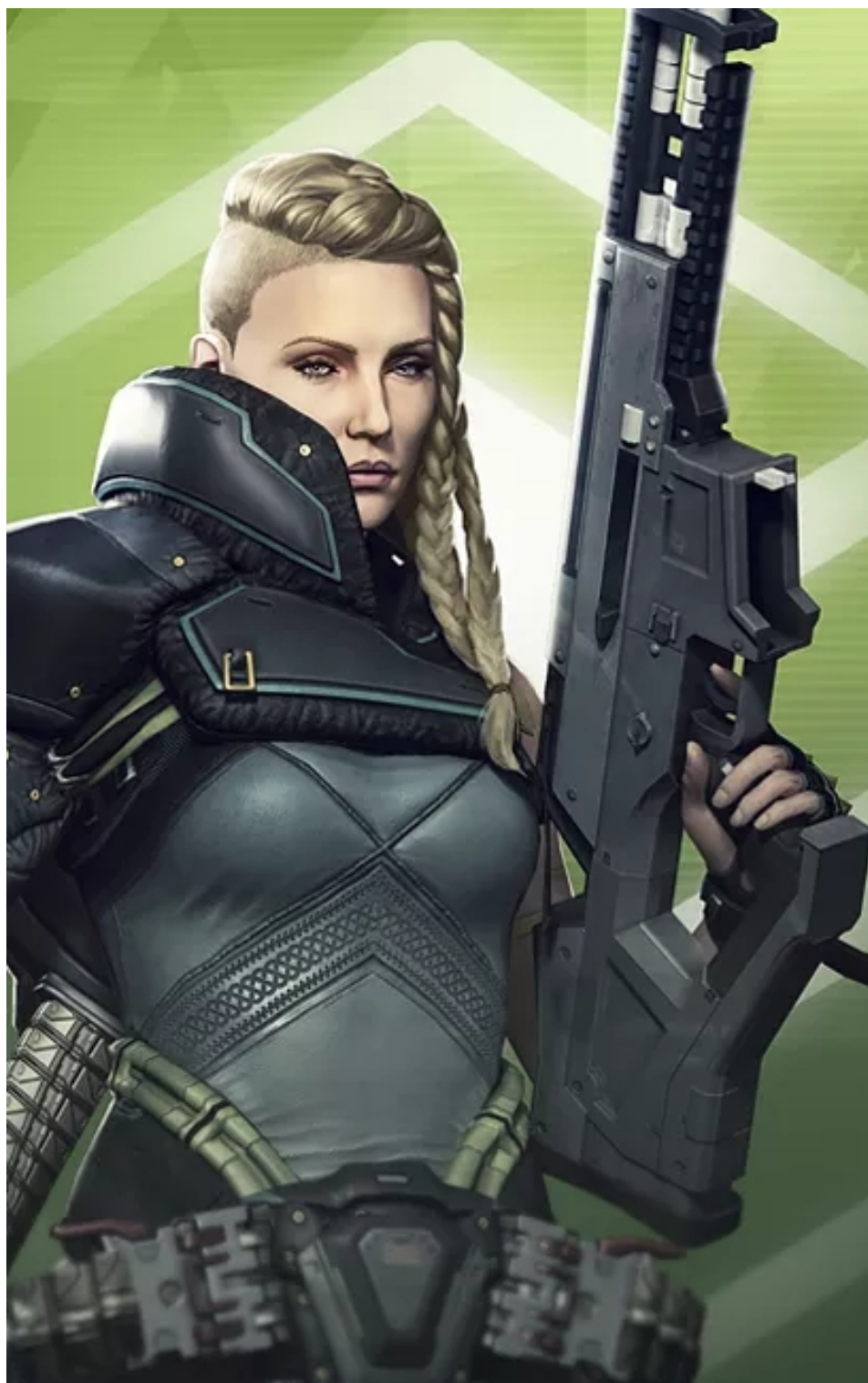
Ammo Pack Expires

Ammo Packs remain in the world for a limited time. If they are not picked up, they will disappear.

DEFAULT WEAPONS

Primary	Secondary	Melee
Dreiss AR	M9 Pistol	Beckhill Combat Knife

JAVELIN

OVERVIEW

Javelin is a hardened mercenary, who wields a Reflex Rocket Launcher and comes equipped with her own Smart Ammunition Armor, that will refill ally's ammo supply while in combat. She is an aggressive and front-line Merc, with a lot of heavy fire-power to bring down her foes. She also specialises in taking out objectives indoors or undercover – an aspect that makes her unique from other Fire Support Merc's.

GOALS

- To introduce a Merc that is easy to pick-up-and-play, but also intricate with small complexities that allow 'pro' players to master in different ways.
- To expand the existing weapon-pool and provide a Merc with their own unique (*for a limited time*) weapons.
- To expand the 'World of Mercs' and expand the female Merc body-type pool in Dirty Bomb.
- To bridge the gap between Assault and Fire Support Mercs, allowing new players to refill their ally's ammo automatically when in close proximity.
- To introduce a Merc with a classic and recognisable weapon – the Rocket Launcher.

USER STORIES

- As a player, I would like a Merc that is easy to play, but hard to master.
- As a player, I wish there was a larger selection of weapons available to me.
- As a player, I want a stronger, battle-hardened character than the existing cast of Merc's, that I can identify with.
- As a new player, I want a Fire-Support that allows me to resupply my team easily while in combat.
- As an old-school shooter player, I would like a Merc with a rocket launcher.

MERC DETAILS

Name: Javelin (also known as FireSupport_05)
Nationality: Norwegian

Role: Objective destruction (EV, generators), and chokepoint explosive AOE Grenade or bomb thing
Physical Attitude: A Viking shieldmaiden, fiercely independent, capable and protective of her teammates
Attitude One-liner: Lagertha (see Vikings / Katheryn Winnick) with a rocket launcher

Body Type: Medium
Health: 120 HP
Max Sprint Speed: 400 units per second.
Eye Height: 76 units

PERSONALITY & BACKSTORY

Javelin was always an outdoors kind of kid, preferring to sleep outdoors rather than in her room. She excelled at sports, showing strength and endurance far above her classmates. Feeling restrained by the strict regulations of most sports teams Javelin looked for something more exciting. Many of Javelin's friends expected her to pursue sport with both ice hockey and handball coaches making attempts to recruit her. By this point Javelin started to lose interest in sports and instead joined the army hoping for a challenge.

After a long and successful period in the military, Javelin once again began to get restless. Surprising those around her she left the military and instead took up Merc work. Javelin's Merc career ranged across the Scandinavian and Nordic countries, as well as a few memorable trips into Russia. Due to increasing issues with fossil fuel supply much of Javelin's early Merc career focused on protecting natural oil and gas reserves. After one particularly explosive incident involving a grenade, several pirates and a gas processing plant Javelin discovered her love for large and frequent explosions. After this incident, she focused on large scale missions which offered her scope to indulge in her love of high explosives.

When innovative Scandinavian start up Ghostclip won MercSERV's annual start up awards, they knew they had limited time to make a real impact. they hired Javelin to 'field test' their new ammo printing armour in London. Not only would Javelin's deployment generate a lot of data, but employing her would also give them the additional benefit of knowing that no one was likely to get close enough to steal the valuable tech.

HER OWN WORDS

"If any harm befalls them, I will tear the lungs out of your body. / You couldn't kill me if you tried for a hundred years."

REFLEX ROCKET LAUNCHER (RRL)

The Reflex Rocket Launcher is a highly advanced weapon that can shoot guided rockets over long distances. It has two fire modes that players can switch through.

- Dumb Mode - Flying straight in a line until it hits a target
- Guided Mode - Rocket follows the cross hair until it hits a target

The rocket launcher has a medium to high cool down and does high on target / small AoE damage.

Switching Modes

The RRL is using intelligent rockets. Their behaviour depends on the active mode of the rocket launcher.

Changing the mode of the RRL will immediately impact the behaviour of the rocket. This means it is possible to shoot a guided rocket and changing it to a dumb rocket mid-air. The same works the other way around. If a rocket is shot in dumb mode it is possible to make it guided by changing the mode. This behaviour goes along with: "Easy to learn, hard to master".

Notable Points

- Keys
  - Left click: shoot rocket
  - Right click: switch between dumb and guided mode
  - Quick ability 1 ('Q'): select RRL
- RRL
  - Short delay between pressing Fire (Left Click) and launching the rocket
  - Rocket
    - High on hit damage
    - Small AoE damage
    - Can be destroyed (shooting down rockets by abilities or bullets)
  - Ability
    - Medium to Long cool down time
  - Remember the mode after being killed (e.g. being killed in guided will respawn you in guided mode)
  - Interaction with other Mercs
    - Rockets explode when they hit Turtle's shield
    - Rocket automatically switches to dumb mode when affected by EMP

Visuals

The character-facing side of the rocket launcher is used to display the following ability information:

- The cooldown time between shots
- Current fire mode (dumb / guided)

Laser Beam:

- While the rocket is in guided mode and has fired (or is currently charging to fire) there should be a visible laser beam very similar to the Arty effect when he is actively targeting.

> **Logic**
> Javelin's Smart Ammunition Armor is producing rockets for her Rocket Launcher.
> These rockets have a production time that is equal to the cooldown timer.

SMART AMMUNITION ARMOR (SAA)

Javelin wears armour that uses advanced 3D printing technology to manufacture ammo rounds within itself. Team mates nearby will gradually receive ammunition (effectively an ammo-aura). The nature of this technology is that she cannot replenish **her own** ammunition, but she does always spawn with full ammunition and can get it from other sources (e.g. ammunition stations). As soon as a player runs out of ammunition, a typical ammo icon gets displayed at the back of Javelin.

Notable Points

- Team mate interaction with the SSA
    - If in a close range gradually receive ammunition
    - If low on ammunition show the ammunition icon at the back of Javelin
- Javelin's interaction with the SSA
    - Always spawns with full ammunition
    - The SSA produces a new magazine for her every 20 seconds.
        - The cooldown timer represents the time it takes to produce a magazine.
        - As soon as the cooldown timer hits 0 a new magazine is ready and can be used as soon as she has space for it (similar to ammo packs)
        - Once she received the ammunition the cooldown timer starts again
    - Can get ammunition from all other sources (ammo stations, ammo packs)
- Enemy interaction with the SSA
    - They do not receive ammunition for standing near Javelin (special compared to ammo stations & packs)
    - Phantom's EMP disables the SSA for several seconds

DEFAULT WEAPONS

Primary	Secondary	Melee
SHAR-C AR	DE. 50 Pistol	Tactical Combat Axe

KIRA

OVERVIEW

Kira is an all-ranged Fire Support. Her fast speed allows her to close the gap between her and her foes, to take them out up-close-and-personal, or she can pick them off from a distance with her long-ranged weaponry and Orbital Laser. Her Orbital Laser can melt through objectives with ease, which makes her a prime pick for outdoor maps, although once indoors she loses her ability's functionality. This makes her an incredibly powerful, but situational pick.

GOALS

- To introduce a faster run-speed and lower health Fire Support, to cater to different playstyles.
- To provide an alternative Fire Support with an ability that requires good aim and timing to use correctly.
- To provide a Merc that has a high skill-ceiling.
- To provide a Merc that can perform well at all ranges, giving them flexibility.
- To expand the 'World of Mercs' that Dirty Bomb delivers upon, by introducing a Japanese Merc.

USER STORIES

- As a player, I want a fast Fire Support that allows me to traverse the map quickly.
- As a player, I would like an aim-based and precision-focused Fire Support ability.
- As a 'pro' player, I want a Merc with more depth and a higher skill-ceiling.
- As a competitive player, I would like a Merc that allows me to up close and from long range, depending on the situation.
- As a Japanese player, I want to see my region represented in Dirty Bomb.

MERC DETAILS

Name: Kira (also known as FieldOps_04)
Nationality: Japanese

Role: Fast, front-line fire-support with an aggressive play-style.
Behaviour: Kira can get up-close and personal on the front lines very fast and provide her teammates with ammo quickly. She can also hang back from a distance and take down enemies with ranged weaponry or her Orbital Laser

Body Type: Skinny
Health: 90 HP
Max Sprint Speed: 440 units per second.
Eye Height: 68 units

PERSONALITY & BACKSTORY

Kira entered the prestigious Tokyo U after graduating from a private Tokyo high school with top results. Initially intending to go into space research she first focused on minimising the Kessler effect (caused by excessive debris around the Earth). It was during this period of research that she discovered a linked series of ex-Soviet defence satellites. Whilst seemingly abandoned these satellites appeared to wake intermittently, sending strange audio transmissions full of numbers. Alarmed at the direction of her research (and some frankly disturbing calls) the University persuaded her to refocus her research. Whilst publicly appearing to refocus, she continued attempting to decrypt the transmissions in her spare time.

On receiving her PhD, she took the unusual decision to travel rather than find academic employment, a decision strongly criticised by her parents. She had however by this time decrypted what looked like the locations of several abandoned Soviet military bases. She hired a Russian man called "Victor" to help guide her to a remote Siberian base that she had identified from the transmission. Whilst at the facility she discovered a briefcase that had been wedged under some rubble. With the help of her guide she was able to free the case. Inside she discovered a strange looking device. Still unsure of its purpose she triggered the device and accidentally called down a laser beam, almost vaporising both herself and her guide. The guide promptly double crossed her and stole the device leaving Kira stranded.

When she finally got back to the nearest town, she was met by a worried older man named Victor who introduced himself as her guide and asked her where she had been. Kira learned that she had been tricked. With the help of the real Victor she established the fake was a mercenary, and possibly not even Russian.

Hoping to track the mercenary down Kira began to take on Merc work. Eventually rumours reached her of an ambiguously Russian Merc working in London. Kira took on the first mission she could find in the London contaminated zone.

HER OWN WORDS...

"I am so pleased to meet you! Probably! Depending on whether you are gross and impolite, and I have to kill you with fire from the sky. Ha ha, I am joking! I would not do that. Unless you annoyed me! Then I really would kill you with fire from the sky! Why do people think I am still joking when I explain that? It is a mystery to me. I'm sure we will become good friends and share many exciting and interesting adventures, as long as you do not die as a result of enemy action, or I am not required to kill you for the reasons I mentioned previously. Joking! (Not joking!)"

Kira Character Quotes:
"Why won't people just see me for who I am, and not for the colossally destructive weapons satellite I control?"
"I am Kira. If you annoy me, I will destroy you from space. Hi!"
"You're trying to be funny, aren't you? This makes you, inadvertently, hilarious."
"They will make a tiny disproportioned doll of me for this."

ORBITAL LASER

SATELLITE STRIKE TARGETER

Targeting the Laser

The Orbital Laser's targeting pointer must be aimed for **x amount** of time, and once fully 'charged' it will deploy at full power.

⚠️ If Kira's aiming becomes off-centre (i.e. Is shot and the pointer moves) while she is charging it, the charge will reset and have to be redeployed.

Laser Active

When the laser is active, a vertical laser deploys from the sky. This has direct impact damage (deals damage at a tick-rate).

The laser will last for a total of **x seconds** and then deactivates.

⚠️ **Important:** There is no way for other players to interrupt the laser's deployment once it has been deployed.

Moving the Laser

Kira can move the laser at will, either by holding 'Q' (Ability Slot 1) or 'Fire' (if Orbital Laser is equipped as a weapon) and allowing the Laser to follow her guider – or she can quickly tap either of these buttons and the laser will move to the last designated position.

Laser Collision

When the laser is deployed it should travel downwards until it collides with a surface. The beam has a small radial area-of-effect and should **not** penetrate walls or corners.

Kira Downed

If Kira is downed or gibbed while the laser is active, it does **not** disable. It should remain in the world for its full duration, although it is no longer controllable by Kira unless she is revived.

> **Note:** If Kira respawns and the laser is still active, it should not be controllable by her anymore.

AMMO STATION

Placement

When the Ammo Station is off cooldown, Kira can place it at any time. The placement toggle can be activated by holding 'E' (Ability Slot 2) or pressing '5', and a hologram/wireframe of the Ammo Station will be shown to Kira. This will help display to the player, where the Ammo Station will be placed upon confirming. To indicate that the Ammo Station can be successfully placed, the hologram will display in **blue**.

Deploying

To confirm deployment, the player should release the 'E' key or press the 'Fire' button to confirm. This will place the Ammo Station wherever it is currently aligned.

> ⚠️ **Unable to place:** Some areas should not allow the Ammo Station to be placed (to ensure no clipping issues occur). In this instance, the Ammo Station's hologram turns **red**.

Deployed

Once deployed the Ammo Station will provide **1 magazine-worth** of ammo in short intervals, to all Mercs within its area-of-effect.

> ℹ️ There is no visual AoE displayed to the player, due to the limited size of the AoE. Players should approach the Ammo Station closely to be resupplied.

Reclaimed

Kira can reclaim her Ammo Station to reposition it, at any time. Reclaiming the Ammo Station is instant once selected to do so.

The amount of cooldown returned, upon reclaiming the Ammo Station, scales to the amount of HP the Ammo Station has left. e.g.

- A 100% health Ammo Station will return **65%** of the cooldown.
- A 50% health Ammo Station will return **32.5%** of the cooldown.

Note: *65% is the highest cooldown return possible.*

Destroyed

Kira's Ammo Station can be destroyed by enemy Mercs.

⚠ Upon being destroyed, the Ammo Station should display a small *explosion effect* (**non-damaging**) and disappear.

DEFAULT WEAPONS

Primary	Secondary	Melee
Stark	Selbstadt. 40	Beckhill Combat Knife

SKYHAMMER

OVERVIEW

Skyhammer is a front-line Merc that has massive fire-power potential with his Air Strike Marker, that is ideal for taking out enemy EV's, objectives and groups of enemy Mercs. He can keep his team stocked up on Ammo supplies as well with his endless supply of Ammo Packs, so plays a vital role and component in any good team line-up. He also has some small ability utility indoors – something that other aerial Fire Supports lack.

GOALS

- To introduce a Merc capable of destroying objectives fast, but with a large cooldown trade-off.
- To introduce a Merc that is easy to use in the hands of new players but has deeper mechanics for 'pro' players to learn and master.
- To introduce a Merc that new players in particular can pick-up-and-play and it distinctly recognisable.
- To expand the 'World of Mercs' with a Scottish addition to the Merc roster.
- To introduce a Merc that will help to bridge the gap between modern military shooter players, and Dirty Bomb.

USER STORIES

- As a player, I would like an easy-to-learn, but hard-to-master Fire Support that rewards skill with high damage output.
- As a new player, I want an easy, middle-ground Merc that I can play without needing to learn complex mechanics.
- As a Scottish player, I would like to see my region represented in Dirty Bomb.
- As a modern military shooter player, I want a Merc that is distinctly familiar to me, that I can pick up and play in a vastly different game like Dirty Bomb.

MERC DETAILS

Name: Skyhammer (also known as FieldOps_01)
Nationality: British – Scottish

Role: A mid-ranged Fire Support that can deal heavy amounts of damage with his Air Strike.
Behaviour: Skyhammer should be positioned with his team at mid-range, and keep them topped up with Ammo, as well as providing cover for Objective Specialists and Medics. He can deal very high amounts of damage with his Air Strike to assist in taking out objectives, or enemy players.

Body Type: Medium
Health: 120 HP
Max Sprint Speed: 400 units per second.
Eye Height: 77 units

PERSONALITY & BACKSTORY

Skyhammer was born and raised in Scotland. He joined the British army in his early twenties and served with an exemplary record. A natural born soldier, he commanded respect in his unit and seemed destined for rapid promotion and senior command.

A series of natural disasters across the globe led to increasing unrest, and Skyhammer found himself increasingly deployed overseas on peacekeeping missions. The British public grew uneasy both with the situation at home and the long and drawn out overseas conflicts. With the public mood turning the British government began cutting funding for the army, and instead increased its use of PMCs to deflect attention away from its foreign policy decisions.

This left Skyhammer's unit in a difficult position, underfunded and badly supported it found itself committed to a peacekeeping mission the British public had little appetite for. During their final week of deployment Skyhammer's unit was called to help rescue an inexperienced PMC unit. Unknown to Skyhammer his overworked commanding officer had failed to relay the fact that another friendly unit had been called in to help. The bad intel and poor organisation led Skyhammer to call in a strike on a friendly unit, which not only led to several deaths but a hefty bill from the PMC who lost many expensive armoured vehicles in the strike.

Later at the court martial Skyhammer was quoted as saying "Nothing goes a little bit wrong with an air strike."

Suddenly finding himself out of work, Skyhammer resolved to put himself in a position where money was never the issue and where he oversaw what missions he undertook. Now the only monarch he answers to now is printed on little paper notes.

Skyhammer takes safety surprisingly seriously, his own safety and that of his team, the enemy not so much. He makes a point to regularly resupply his allies with ammo, after all he never wants his team to go short of supplies ever again. Thanks to some connections with fellow ex-Soldiers working for local arms manufacturers, Skyhammer has access to some nifty airstrike technology. From now on the call on when and where to call an airstrike is entirely Skyhammer's responsibility, just the way he likes it.

HIS OWN WORDS...

"Anger not me or the heavens lest I strike you down with big bastard airstrikes."
"I'll bomb you back into, well, any age you fancy really."
"Not to boast but, I've done this before, you know?"
"I got a bullet with your name on. In fact, I got LOADS."
"They shall tell tales of this day. When the handsome Scot kept killing the eedjits."

"It doesn't matter if it's an actually-there pilot flying a fast jet in person or a virtually-there pilot flying a drone from a sofa half a world away, if it's a flying thing up in the sky with bombs with the intention of dropping them on naughty people but not on nice people, well, then it stands to reason that they need someone on the ground to tell them where the naughty people are and where the nice people are who they don't want to blow to bits. And that's my little speciality. Well, I have a sideline in keeping people supplied with ammo, but who am I kidding? All anyone wants to talk about is the Fire Support fireworks.

Thing is, nothing ever goes just a little bit wrong with an airstrike. It either doesn't happen, because someone calls it off, or didn't call it in the first place, or it happens no matter what, no matter who's there when it goes off. And there's nothing left when it does. Scorch marks if you're lucky. So, if you see me running away from a smoke grenade you do not really want to be too far behind me, you understand? Not to boast or nothing but, well, I've done this before, you know?"

AIR STRIKE MARKER

Throwing Air Strike Marker

The Air Strike Marker can be thrown like a grenade – although, it cannot be thrown quite as far as abilities like a Frag Grenade. It will detonate a short time after landing.

Indoors Interaction

If Skyhammer throws his Air Strike Marker indoors, and the Air Strike cannot be called in (due to being under cover), then it will act like a weaker Frag Grenade. The maximum damage should be much lower than that of a Frag Grenade, and it should also retain a slightly longer cooldown.

> ℹ️ If the Air Strike Marker is thrown as a Grenade indoors, then ~65% of the cooldown will be refunded to Skyhammer immediately (this should provide him with a 20 second cooldown).

Outdoors Interaction

If Skyhammer throws his Air Strike Marker outdoors, it retains it's Grenade-like functionality, but also calls in the Air Strike when there is a clear path to the sky, from the destination that the Marker lands. The Air Strike will be called in a short period after the Marker detonates.

⚠ The visual effect for this should be an overhead Plane that flies over. Appropriate sound effects should also be present to indicate this to the player.

Strike Placement

The Air Strike's path is defined by being perpendicular from where Skyhammer throws his Marker from. All Air Strike bomblets will then land in a straight line along this defined path, a set distance apart from each other.

AMMO PACKS

Throwing Ammo Packs

Skyhammer can quickly throw an Ammo Pack by pressing 'E' (Ability Slot 2), or by pressing '5' he can equip them and throw then with the 'Fire' button.

⚠ *Ammo packs can only be thrown a short distance. They are designed to be dropped or given to Mercs nearby.*

Picking Up Ammo Pack

If a Merc picks up an Ammo Pack it will restore their ammo count to **maximum capacity**.

⚠ *Ammo Packs can be picked up by any Merc – even Mercs from the enemy team. This encourages careful placement of Ammo Packs, so that the enemy doesn't pick up Ammo that's left behind.*

Ammo Pack Direct-Hit

If Skyhammer throws an Ammo Pack at an ally it will reduce their ability cooldown by **5 seconds**.

Ammo Pack Expires

Ammo Packs remain in the world for a limited time. If they are not picked up, they will disappear after **35 seconds**.

DEFAULT WEAPONS

Primary	Secondary	Melee
M4A1	DE. 50 Pistol	Beckhill Combat Knife

STOKER

OVERVIEW

Stoker is a mid-ranged Fire Support that has utility both inside and outside but is considerably lacking in front-loaded fire-power in comparison to this Fire Supports, because of his unique usability indoors. He specialises in area denial with his incredibly powerful Molotov and is able to block off entire areas of the map for the enemy team.

GOALS

- To introduce a Fire Support Merc that isn't reliant on being outdoors for their ability to function properly.
- To introduce a Merc with the ability to cause high amounts of area-denial.
- To introduce a fire-based ability into Dirty Bomb.
- To expand upon the 'World of Mercs' and the English Merc roster in Dirty Bomb.

USER STORIES

- As a player, I want a Fire Support that I can use without having to worry about being outdoors to maximise their effectiveness.
- As a player, I would like an area-denial Merc.
- As a class-based FPS player, I want to see a class with fire-based functionality.
- As a British player, I want to see the Merc roster for England expanded upon.

MERC DETAILS

Name: Stoker (also known as FieldOps_03)
Nationality: British – English

Role: A mid-ranged Fire Support that can create an area-denial effect with his Molotov... As well as melting unsuspecting Mercs.
Behaviour: Stoker is great at mid-range – hanging back with his team and keeping them topped up with his Ammo Station. Good timing and positioning are key to playing Stoker well, as a well-timed Molotov can lock down an entire area of the map and completely deny the enemy access to certain areas.

Body Type: Medium
Health: 120 HP
Max Sprint Speed: 400 units per second.
Eye Height: 77 units

PERSONALITY & BACKSTORY

Stoker was an officer in the British Army when his unit was pinned down by a terrorist cell and separated from his unit. Realising the only way to protect the rest of his unit and prevent a large-scale attack on a civilian target was to call down an airstrike on his own location, he did so. Remarkably Stoker survived, and the terrorist unit was destroyed. Stoker won't talk about the details, he simply showed back up the next day at the nearest army base with third degree burns and a half-drunk bottle of whisky. Not long after this incident he left the army.

He resurfaced three years later when he began undertaking Merc work, completing a number of high profile missions in Russia, Spain and Italy. His signature Molotov grenades were first spotted in use during a raid on an undercover research facility just outside of Tunguska and seem to have been refined several times before he arrived at the final version.

He always wears a mask in public. No one's even sure when and how he eats. He is also the only Merc to have completed the mandatory MercSERV fire safety training where he scored an impressive 11/10.

HIS OWN WORDS...

"Empty threats aren't really my style."
"Do be careful of the napalm. Tricky stuff."
"Oh don't be a bore about this. Can't abide a bore."
"Remember, your weapon is loaded, if you pull the trigger it WILL go bang."
"Most guns have a safe end and a naughty end. You really should learn to tell one from the other."

"It really does pay to be a little cautious with napalm, you know? It can be tricky stuff. Most of the time it's good as gold, but it can play up. Best to keep a step or two back, leave it the professionals, eh? Never hire someone who hasn't made a mistake. That's the problem with some of the young 'uns. Think they know it all. And some of they are quite good at what they do, there's no denying it. But they lack experience. When all's said and done, you need a chap, or chapess, who knows what's what. And that, I fear, is rather where I come in. Been there, done that, as the young folk say. I've forgotten more about things that burn than you'll ever know. At least, I do hope so. For your sake. Not everyone deals well with fire, you see? Me, I know it, know it well, always have. I've tangoed with it many a time. But some people are apt to take it amiss. Running. Screaming. That sort of thing. All rather dramatic. Not quite my style. But it does seem to make rather an impact, which is all to the good, wouldn't you say?"

MOLOTOV GRENADE

The Molotov Grenade is a low impact damage grenade, but high damage output over time. It is great for area-denial on key areas of the map and can be used indoors, unlike other Fire Support area-denial abilities.

Throwing A Molotov

Stoker can throw his Molotov a reasonable distance – approximately the same as a Frag Grenade. Unlike other grenades, the Molotov will **detonate on impact**, causing the Molotov effect.

> ℹ️ Before throwing a short 'arming' animation will play, so that Stoker cannot immediately surprised an enemy by throwing a Molotov at them the moment they come into view.

Molotov Lands

When the Molotov lands, or contacts a Merc or other surface, it will detonate immediately.

Molotov Effect

The Molotov will create a large area-of-effect where it lands. This will last for a total of **7-9 seconds**; the flames will fade out from outside to inside, over the final seconds.

> ⚠️ **Important:** *All fire particles should fall to the nearest horizontal surface, and not stick to any vertical walls.*

Molotov Damage

The Molotov's flames have the capability to damage anything that it touches – this includes Mercs and objectives. The damage is dealt in short intervals, which should occur 4-times-per-second, dealing **35 damage** per interval. This should be the case for each flame particle (of which there should be a total of 16).

- Inner ring = 1 particle.
- Mid ring = 5 particles.
- Outer ring = 10 particles.

⚠ The Molotov should deal significantly less damage to objectives, per particle (lower damage modifier), else it will be able to destroy objectives much faster than any other Merc.

Fire Dispersal

Fire can be dispersed by enemy Mercs, although only with certain abilities. These include:

- **Smoke** – To starve the flames of Oxygen.
- **Explosives** – To blast away the flames.

The area of the Molotov that is dispersed it highly dependent on the blast radius of the explosive (*e.g. One Sticky Bomb or Lactic-40 Grenade will not disperse the whole Molotov*).

AMMO STATION

Placement

When the Ammo Station is off cooldown, Kira can place it at any time. The placement toggle can be activated by holding 'E' (Ability Slot 2) or pressing '5', and a hologram/wireframe of the Ammo Station will be shown to Kira. This will help display to the player, where the Ammo Station will be placed upon confirming. To indicate that the Ammo Station can be successfully placed, the hologram will display in **blue**.

Deploying

To confirm deployment, the player should release the 'E' key or press the 'Fire' button to confirm. This will place the Ammo Station wherever it is currently aligned.

⚠ **Unable to place:** Some areas should not allow the Ammo Station to be placed (to ensure no clipping issues occur). In this instance, the Ammo Station's hologram turns **red**.

Deployed

Once deployed the Ammo Station will provide **1 magazine-worth** of ammo in short intervals, to all Mercs within its area-of-effect.

ⓘ There is no visual AoE displayed to the player, due to the limited size of the AoE. Players should approach the Ammo Station closely to be resupplied.

Reclaimed

Kira can reclaim her Ammo Station to reposition it, at any time. Reclaiming the Ammo Station is instant once selected to do so.

The amount of cooldown returned, upon reclaiming the Ammo Station, scales to the amount of HP the Ammo Station has left. e.g.

- A 100% health Ammo Station will return **65%** of the cooldown.
- A 50% health Ammo Station will return **32.5%** of the cooldown.

Note: *65% is the highest cooldown return possible.*

Destroyed

Kira's Ammo Station can be destroyed by enemy Mercs.

- ⚠ Upon being destroyed, the Ammo Station should display a small *explosion effect* (**non-damaging**) and disappear.

DEFAULT WEAPONS

Primary	Secondary	Melee
Timik-47	Simeon .357	Beckhill Combat Knife

FRAGGER

OVERVIEW

Fragger is an aggressive point-man, capable of engaging the enemy in close quarters and from a distance. He has a lot of heavy fire-power, in the form of his heavy weaponry and Frag Grenade. He is able to cook the grenade for a well-timed assault on a group of enemy Mercs, giving them very little time to react and flee from the incoming explosion.

GOALS

- To introduce a Merc capable of providing large area-of-effect damage.
- To introduce a more combat-focused Merc role in Dirty Bomb.
- To introduce a high health combat Merc.
- To introduce a Merc that feels familiar to other FPS players, and that new players can adapt well to.
- To expand the 'World of Mercs' and introduce a Merc from a new region within the USA.

USER STORIES

- As a player, I want to be able to be able to clear out multiple enemies at once.
- As a player, I want a Merc that is more combat focused, and allow me to support my team through combat skills.
- As a player, I would like a Merc with good survivability and combat focus.
- As a new player, I would like a Merc that feels familiar and recognisable to me, that I can easily play.
- As an American player, I would like to see more areas of the USA represented in Dirty Bomb.

MERC DETAILS

Name: Fragger (also known as Soldier_01)
Nationality: American – USA

Role: Fragger is the point-man of any good team. Capable of blasting his enemies with his handy Frag Grenade, and armed to the teeth with heavy weaponry, he's a tough foe to face.
Behaviour: Fragger is an aggressive point-man who should get up-close-and-personal with his enemies to take them down. His Frag Grenade gives him some heavy fire-power for splitting up groups of enemies and taking them out quickly.

Body Type: Heavy
Health: 130 HP
Max Sprint Speed: 390 units per second.
Eye Height: 76 units

PERSONALITY & BACKSTORY

Fragger had a successful career in the US Army receiving numerous awards for bravery. As a specialist in urban warfare he was deployed to several global hotspots to aid natural disaster relief operations. After leaving the army he found himself unsure what the next steps in his career would be. With bills to pay he took work as a motion capture artist in the games industry. His army friends were unsupportive of his career choice. A particularly bad experience after an army reunion led Fragger to register with MercSERV on a dare. His extensive urban combat experience was extremely valuable, and he immediately received several lucrative job offers.

He's not stopped since, his urban warfare skills naturally leading him to London. His army buddies are no longer laughing, in fact they're a little worried Fragger now has a sizable armoury of his own and a point to prove.

HIS OWN WORDS...

"Just like shootin' Turkeys. Quite heavily armed turkies, but I think the analogy still stands."
" Some kind of Thunderful, that's what I am."
"I do Crowd Control. I'm like a traffic cop. Just with a machine gun. And grenades. And I don't give out tickets, I...you know what, bad analogy."
"Don't make me Bangry. You wouldn't like it when I'm - who am I kidding, I'm AWESOME when I'm Bangry!"
""One shot, one kill" ain't as good as "Lots shots, LOTSA KILLS""

"Pleased to meet ya. Hey, wait, do I have to kill you for money? Hah! Kidding. Just kidding! Ah, gets me every time, that one. So, I'm what you'd call a Point Man. Tip of the spear, door-kicker, first to the fight, that kind of jazz. I leave the strategizing and technicalities to someone else. Me, I run at the enemy, yelling, and shoot 'em. OK, it's a little more complex than that, but you get the general concept. Yelling. Shooting. Running. If you need flowers arranged, or a pie baked, well, you have the wrong number. Sorry 'bout that.

FRAG GRENADE

Cooking

A Frag Grenade can be cooked before it is thrown. This is a unique mechanic to Fragger's grenade, which allows him to time his shot. Fragger can begin cooking his Frag Grenade by holding 'Q' (Ability Slot 1) or equipping it with '4' and holding the 'Fire' button.

⚠ The Frag Grenades can be released at any point by the player. If it is held for the full duration, it will be thrown automatically by Fragger before it detonates in his hand.

Releasing Frag Grenade

When the player releases the 'Q' or 'Fire' button for cooking the grenade it will be thrown. The grenade should be a mid-to-long range and have a fast travel speed.

Grenade Explosion

Upon detonating the Frag Grenade will create an explosion which will deal **damage in the centre** and **fade out to 0 damage** nearer the outer radius.

ℹ The Frag Grenade will only detonate after it's fuse expires – it should not explode on impact or detonate upon being shot.

DEFAULT WEAPONS

Primary	Secondary	Melee
K-121	Simeon .357	Beckhill Combat Knife

NADER

OVERVIEW

Nader is an aggressive front-line assault Merc. She has the capability to take out multiple enemies with her Grenade Launcher, which can be useful to clear out choke points. Nader is also quite effective at taking down objectives with her grenades indoors, when Fire Support Mercs are unable to. She is a hardened Merc, best-suited getting up in the enemy's face and dealing high amounts of damage – her Martyrdom is also a useful trap for unsuspecting enemies.

GOALS

- To introduce a lighter assault Merc, with similar run-speed to Fire Supports, without reducing fire-power.
- To introduce an assault Merc who has the ability to keep us sustained-fire with their ability, rather than a large, single, high-impact ability.
- To implement a mechanic that allows players to be useful when they are downed, and still contribute to a team-fight.
- To allow players to 'fight back' against melee gibbing when they are downed.
- To expand the 'World of Mercs' and introduce a German Merc to Dirty Bomb.

USER STORIES

- As a player, I want a slightly lighter assault Merc, that is still capable of high damage output.
- As a player, I want an assault Merc that is more focused on sustained-fire, as opposed to a single-use and high impact ability.
- As a player, I rely heavily on gibbing enemy players with a melee strike when they are downed. I'd like to be able to counter this.
- As a new player, I feel useless when I am downed – I'd like a way to contribute to team-fights even once I am downed.
- As a German player, I would like to see my region represented in Dirty Bomb.

MERC DETAILS

Name: Nader (also known as Soldier_03)
Nationality: German

Role: Nader is a front-line aggressor, with a high-power Grenade Launcher, capable of dispatching multiple enemies.
Behaviour: Nader plays best getting up-close-and-personal with her enemies – shooting them up close with her SMG's and engaging them in tight spaces with a barrage of explosives.

Body Type: Medium
Health: 120 HP
Max Sprint Speed: 410 units per second.
Eye Height: 76 units

PERSONALITY & BACKSTORY

Whilst completing a degree in Business administration Nader decided she needed a break before continuing her studies. She decided to join the German army intending to use the experience to see the world. After enrolling she met and began dating a woman named Alys Lang who had been working with arms manufacturer KMA's sales division. After Alys was injured by a roadside explosion whilst delivering arms in Iraq both Nader and Alys decided it was time to seek a safer career. The pair moved to London and married, deciding to start a business arbitration and mediation consultancy.

Three years later the Dirty Bomb incident occurred, and the pair were forced to abandon their office. A former co-worker of Alys' who still worked for KMA offered to let the couple stay in her flat in Brighton until they could arrange new accommodation. When Nader heard that KMA were struggling to find Mercs to guard their arms shipments to MercSERV London Nader offered to help. When the shipment was attacked by Jackal, Nader got her first taste of combat in years, and she realised that she had missed the thrill of combat.

After successfully defending the shipment, Nader was asked by KMA to gather intel on the London contaminated zone. Whilst she doesn't need the money, and work is dangerous there's just something extremely fulfilling about spending the day blowing stuff up before taking the train to Brighton in the evening.

HER OWN WORDS...

"For a long time I was struggling with a - how you say? - a conundrum. I was upon the horns of a dilemma. You see, I simply could not decide whether it was better to be carrying an assault rifle (or a machine gun, something like that), or to be carrying a load of grenades around with me. Because they are both very useful, no? You can shoot one directly at people, and the other you can throw over things, bounce off walls, they're really very handy. Decisions, decisions.

And then finally I realised, WHY NOT CARRY BOTH AT ONCE? So, I carry this funny little revolver grenade launcher AND an SMG. And it really has proved to be highly effective. I can lay down a salvo of grenades in a very short period of time, seconds really, and that seems to have quite an effect on the enemy. And then, for the more traditional encounter, I can shoot directly at individuals. So, I have both an area solution and a point target solution. It's really quite an effective system."

Nader Character Quotes:
"If you need a lot of grenades in a very short time, I am your woman."
"Don't annoy me, or I'll kill you, and everyone near you."
"Many people have attempted to patronise me. Some can still walk"
"I've killed better men than you. But then I've killed better flies than you also."

GRENADE LAUNCHER

Wielding Grenade Launcher

The Grenade Launcher is a wield able weapon, that Nader can equip by pressing 'Q' (Ability Slot 1) or '4'. Equipping the weapon will not automatically fire it – it must be manually fired by the player with the 'Fire' button.

Firing

When the Grenade Launcher is equipped, and the player presses the 'Fire' button, it will fire a single grenade. The grenade should travel a medium distance in an arc. There is a short arming period in which it will not detonate, so that it cannot be used effectively as a 'spam' weapon at very close range.

After a short delay it will **automatically detonate**, so that they cannot be fired long-distance.

On Contact

After the arming period, the grenade will **detonate upon contact** with an enemy Merc or an objective – however, it should bounce off walls and other surfaces.

⚠️ If the grenade is still within its arming period and it hits another Merc or the objective, it will simply bounce off as if it were a wall or other surface. It will then detonate once it reaches the end of its life-span.

Explosion

Due to the high volume of grenades that Nader has access to, they are considerably weaker to other explosives. However, using multiple at once can create devastating effects.

ℹ️ The grenades will do **damage** at the centre of the explosive radius – scaling out down to 0 damage on the outer radius. A direct hit bonus can also be applied.

MARTYRDOM

Condition for Use

Nader's Martyrdom can only be used **when she is downed**. If she is alive or gibbed, trying to activate Martyrdom will simply do nothing.

Triggering Martyrdom

Martyrdom can be activated by pressing 'E' while downed and will cause Martyrdom to execute.

Explosion

When activated, Nader will drop a large explosive at her location. After a short period, the explosive will detonate, **gibbing Nader** and dealing damage in a large radius around her.

⚠️ If Nader is gibbed by the enemy during the fuse period of the Martyrdom, the Martyrdom explosion will still detonate. Once it is activated it should be considered 'in the world' and cannot be stopped (such as an active Frag Grenade).

DEFAULT WEAPONS

Primary	Secondary	Melee
Crotzni	Selbstadt .40	Beckhill Combat Knife

RHINO

OVERVIEW

Rhino is the go-to heavy in Dirty Bomb. He has more than double the health of other Mercs and can hold down choke points with incredibly efficiency. He works best when paired with a skilled Medic, capable of keeping him alive and becoming an unstoppable barrier for his foes. While his weaknesses may be his large size and slow speed, he more than makes up for this with his incredible fire-power and high survivability.

GOALS

- To introduce a very high health Merc.
- To introduce a Merc that can hold key positions on maps and provide an element of area-denial.
- To expand the Merc roster with a Merc that is recognisable to players of games in a similar genre.
- To provide a Merc that has a low movement speed – so they are not totally reliant on Dirty Bomb's fast movement.
- To expand the 'World of Mercs' and introduce more variety to the British cast of Mercs.

USER STORIES

- As a player, I would like a very high health Merc.
- As a player, I want an area-denial focused heavy Merc, that allows me to hold down positions on maps.
- As a classed-based FPS player, I am used to having a 'heavy' class that allows me to mow down enemies with a large weapon.
- As a new player, I would like a Merc that isn't overly reliant on Dirty Bomb's fast movement system.
- As an English player, I want to see the cast of Dirty Bomb Mercs expanded to represent more British Mercs.

MERC DETAILS

Name: Rhino (also known as Soldier_04)
Nationality: British – English

Role: Rhino is a barrier – a deadly barrier. He can gun down multiple enemies incredibly quickly, and hold positions for long periods of time, with an unlimited-ammo Minigun.
Behaviour: Tanky man-mountain, Rhino is perfect at holding down enemy approach routes, soaking up damage and suppressing multiple enemies. He is perfect for holding down a choke point, especially when paired with a good medic!

Body Type: Heavy
Health: 180 HP
Max Sprint Speed: 360 units per second.
Eye Height: 76 units

PERSONALITY & BACKSTORY

Rhino was born in London, he developed a passion for business during his teens launching several successful small businesses. This hard work paid off and he was able to pay his own way through university. Whilst Rhino was always proud of the fact he put himself through school, his teachers often felt they learned more from him then he did them.

Midway through his MBA, after beginning a research project he discovered that Merc work was far more rewarding than even the highest paid CFO job. He quit school, undertook combat training and launched a successful career as a mercenary. Having his own independent income source allowed Rhino to gain a taste for the finer things in life. Among his friends he's the go-to guy for advice on wine, cheese, and combat gear.

Since Rhino already lived in London he was one of the first Mercs allowed to enter the London Contaminated Zone. With his eye for logistics he uncovered evidence that the CDA weren't being entirely truthful about their operation.

Rhino is convinced there's further profit to be made, he's got terabytes of information ready to be put to use. He just needs to find the right time, and the right person to lean on. Until then he's happy on the streets of London making eye watering amounts of money. If only the catering was a little better.

HIS OWN WORDS...

"I was studying for an MBA, but when you look at the opportunities, well, every Tom Dick and Harriet has an MBA these days, but there are relatively few heavy weapon specialist PMC operatives. Supply and Demand, right? And I'd been, well, working out a little, so it turned out I could carry one of those vehicle-mounted miniguns on my own, and the ammo, and the power supply, and the new super-heavy body armour. There was a helmet to go with the armour, but I just couldn't see anything with it on, and if I can see you, and have ammo left, well, that's a bit of a self-solving problem, isn't it? Everyone thinks I'm slow because I'm big. I'd explain to them about my academic qualifications, the breadth of my reading, my hobbies and interests but really, what's the point? Philosophy must be its own consolation sometimes."

Rhino Character Quotes:
"When I shoot someone, they do rather tend to stay shot."
"I've bench-pressed smarter things than you."
"It was this or finish the MBA. And I was just done with that stuff, you know?"

MINIGUN

Wielding the Minigun

The Minigun is a wieldable weapon which Rhino can equip by pressing 'Q' (Ability Slot 1) or '4'. The Minigun is very heavy, so will slow Rhino's movement speed more than a regular gun, while wielding it.

Spinning Up

While wielding the Minigun, Rhino can spin up the barrel so that it can be fired instantly, once it is at full-spin. The player can activate it without firing by holding the 'Right Mouse Button'.
⚠️ While spinning the Minigun, Rhino's movement speed is slowed drastically. He can only walk while it is spinning or firing.

Firing

To fire the Minigun, it **must** first be fully spun-up. The player can either spin it up manually by holding 'Right Mouse Button', then instantly fire the Minigun with 'Left Mouse Button', or they can simply hold 'Left Mouse Button' and a short spin-up time will be initiated before firing. If spun-up with 'Left Mouse Button', then the Minigun will fire as soon as it is ready.
The Minigun should fire a huge number of bullets in a short amount of time, although the spread for the Minigun must be large to compensate for the incredibly high DPS.
ℹ️ The Minigun has **unlimited ammo**, although it uses an Overheat mechanic to ensure constant firing cannot occur. Rhino does not need to rely on Ammo Packs to keep up his Minigun though.

Overheating

If Rhino continuously fires the Minigun, it will eventually overheat. If the Minigun overheats then the player must wait for it to completely cooldown before being able to fire the Minigun again.
ℹ️ This should be indicated to the player by gradually turning the barrel **bright red**, as it nears the maximum-use time.

DEFAULT WEAPONS

Primary	Secondary	Melee
Ahnuhld-12	Simeon .357	Beckhill Combat Knife

THUNDER

OVERVIEW

Thunder is an aggressive point-man, which can soak damage and providing key opportunities for his team, with his Concussion Grenade. He excels in confined spaces and is able to take on multiple enemies with ease – after blinding them, of course. He is very big and very loud, although this is very much a reflection of his playstyle on the battlefield.

Goals

- To introduce an assault point-man that excels in 1v1 gun-fights with other Mercs.
- To introduce a heavier Merc than Fragger, capable of using high power weaponry, such as LMG's and Assault Rifles.
- To introduce a Merc that has an ability that relies on gunplay, as opposed to be an actively offensive ability.
- To implement familiar mechanics to players of other FPS titles, such as the Flashbang grenade.
- To expand the 'World of Mercs' and introduce a Russian Merc to Dirty Bomb.

USER STORIES

- As a player, I want a heavy Merc, capable of taking on others well in 1v1 engagements.
- As a player, I would like a heavier Merc than Fragger that uses high power weaponry such as LMG's and Assault Rifles.
- As a competitive player, I want an assault Merc that has an ability to compliment gunplay and weapon usage, as opposed to relying on my ability for damage.
- As a Counter Strike player, I want recognisable mechanics, such as a Merc with the ability to flash-bang the enemy.
- As a Russian player, I want to see my region represented more within Dirty Bomb, with a Russian Merc.

MERC DETAILS

Name: Thunder (also known as Soldier_02)
Nationality: Russian

Role: Thunder plays a good point-man – a point-man with the ability to blind his foes for him and his team to gun down.
Behaviour: Thunder plays best when played aggressively. His high-power weaponry can shred enemies quickly – engaging at close range in 1v1's is his strongest attribute and is excels at coming out the victor.

Body Type: Heavy
Health: 160 HP
Max Sprint Speed: 375 units per second.
Eye Height: 77 units

PERSONALITY & BACKSTORY

Thunder is a frontline operative frequently operating in remote and difficult conditions. He was one of a select number of Mercs who were actively invited to work in London due to having previously shown high resistance to radiation and few side effects from MercSERV's anti-radiation treatments. A specialist in retrieving items for danger zones this made him highly valuable asset. In the wake of the Dirty Bomb incident MercSERV saw a spike in the number of requests from private individuals seeking to retrieve sensitive information. He only keeps a very small amount of this data for personal use, making him a valued specialist.

When asked he states very loudly that he is ex-Spetsnaz though this claim is heavily disputed. Little else is known about his background except that he dislikes open water strongly.

HIS OWN WORDS...

"I specialise in bang. Is more than job. Is ART. Also, job."
"To want is to suffer. I don't want to suffer. So, I do."
"Regularity of victory become tedious."
"They are dead, cause of death: me."
"What is life but struggle? Man, against man. Woman again man. Dog against cat. Cat against fish. Fish against the sea. The sea against...the beach. The beach. against...against...I have lost train of thoughts. See? Is struggle. I have tactical specialty, specialization, like Darwin, is struggle of nature, like I say. I am Point Man. Am first to fight, at front of front line. Is where I do best work. I try other. I try flower arranging. I try double entry book keeping. I do not enjoy that struggle. Struggle I enjoy, is with guns, is with grenade, is not with spreadsheet macro. They frighten me. I am honest, they frighten me. Bullets, not so much. You know where you stand with bullet."

CONCUSSION GRENADE

Throwing Concussion Grenade

Thunder's Concussion Grenade is not cookable, although that does mean he can throw it very quickly after quickly arming it. It is on a short fuse and will detonate as soon as this fuse ends. The grenade can be thrown at a similar speed to a Frag Grenade, although it's distance is limited due to its short fuse.

⚠️ The fuse **does not start until the grenade is thrown** by Thunder. Arming the grenade does not start the fuse.

Detonation States

Upon detonation, the Concussion Grenade has two effects – concussion and blinding.

Concussion: The Concussion effect will affect all enemy Mercs within the blast radius of the grenade (similar to a Frag Grenade). It will deal no damage but should slow their movement and distort their vision severely. This effect should last longer than the blinding effect.

Blinding: The blinding effect will affect all Mercs that are within a large radius of the Concussion Grenade, blinding their vision for a few moments. It has a limited range but is much larger than the Concussion area-of-effect. It also only effects players who are looking in the direction of the blast.

ℹ️ Thunder can blind himself by looking at the Concussion Grenade when it detonates.

Blinded State

When a Merc is blinded, their screen should be displayed as bright white, with no HUD elements displaying. Over time this will fade back in to regular vision.

ℹ️ The time in which a Merc is blinded for is very much dependant on their distance from the Concussion Grenade's explosion. The further away they were standing, the shorter the blinding duration will be.

Detonation Visuals

The Concussion Grenade should have a distinct visual effect upon detonating. A blinding white explosion should display the area-of-effect.

DEFAULT WEAPONS

Primary	Secondary	Melee
MK46	Smjüth and Whetsman .40	Beckhill Combat Knife

AIMEE

OVERVIEW

Aimee is a glass-cannon marksman, capable of dispatching her foes quickly and efficiently – but one missed shot can be a detriment to her survival. Using her SNITCH Device, she can spot enemy Mercs for her teammates, as well as debilitating them with a damage debuff which will allow Aimee and her teammates to deal extra damage to the enemy while they are spotted. Aimee is great for repositioning at well, with an incredibly high movement speed and low health pool, she will need to in order to stay alive.

GOALS

- To introduce a sniper Merc that is quick at repositioning to suit a new play-style.
- To introduce a "glass cannon" style sniper that can deal heavy damage to enemy Mercs, but also has low HP, so is vulnerable up close.
- To introduce another combat-focused female Merc.
- To implement a new mechanic of 'Debilitating' an enemy – causing bullets to deal more damage.
- To expand the 'World of Mercs' and introduce a French Merc to the Dirty Bomb roster.

USER STORIES

- As a player, I would like a fast-moving sniper that allows me to reposition quickly.
- As a player, I want a Merc that can take down enemy Mercs incredibly quickly – even if that means being vulnerable myself.
- As a player, I want a more badass female Merc, who has a high combat focus.
- As a recon player, I want my spotting ability to extra team functionality, beyond just spotting the enemy.
- As a French player, I would like to see my region represented within Dirty Bomb.

MERC DETAILS

Name: Aimee (also known as CovertOps_02)
Nationality: French

Role: Mid- to long-ranged marksman and spotting for her allies.
Behaviour: Particularly skilled at battlefield surveillance, reconnaissance and target designation. She excels at identifying enemy positions and activity for her teammates. Extremely useful in attack or defence, she's a force multiplier, allowing all her teammates to fight more effectively. She's also a potent sniper, able to close down open areas and enemy fire support.

Body Type: Skinny
Health: 90 HP
Max Sprint Speed: 440 units per second
Eye Height: 68 units

PERSONALITY & BACKSTORY

Aimee initially began working as a corporate spy. Her developing reputation led her to take on increasingly dangerous missions. Her natural concentration together with her espionage skills, led her to train as a sniper.

In 2016, Paris was rocked by a series of art thefts. A desperate group of art collectors frustrated at the lack of police progress hired Aimee to investigate the thefts. She uncovered a plot to sell the paintings during a secret auction, audaciously staged at the Louvre under the cover of a fashion show. Aimee was able to infiltrate the show and trap the thieves and their potential buyers inside the museum until the authorities arrived. It was during this mission Aimee met Max Bashki an extremely wealthy and successful fashion designer. He soon offered her a bodyguard job, and whilst Aimee normally avoided further contact with people she met during the course of her work as a fan of Bashki's she felt she couldn't say no.

Aimee was working as a bodyguard for Bashki, when he was shot through the head with a high-powered rifle. After conducting an investigation, the culprit was identified as British Merc Proxy. Aimee used her S.N.I.T.C.H device to take out Proxy's eye, before she could finish the job Proxy revealed that Bashki hired her to take out Aimee, but the operation went wrong. As a peace gesture Proxy offered to refer Aimee to MercSERV and the lucrative London market. Finding herself out of work and with a tarnished reputation Aimee accepted.

HER OWN WORDS...

"Strictly speaking, I'm the Aimer, not the Aimee."
" Are you always so easily distractible? This concerns me."
"As a surveillance expert, I observe much that I do not wish to. Such as you."
"First I kill you. Then I find whoever dressed you and kill them."
"They claimed it was a croissant. I was forced to kill them."

"It is lovely to meet you. How nice. You know, people assume I can't fire this thing, that it's not even mine. I suppose I must be just holding it for the real sniper, a man of course, who'll show up any moment. That's quite amusing. I do love being underestimated. And if it's by a man? It is even more sweeter. My friends ask me, what do you have to do for people to take you seriously. And I tell them, you just make a little hole in them, in their face, from a long way away. Then they take everything very seriously indeed, at least for a few moments. So now everyone I work with knows what I can do. And their conduct has changed accordingly. It is a process of education for them."

SNITCH DEVICE

Throwing the SNITCH Device

The SNITCH Device will be thrown by Aimee when deployed, but unlike other throwable items, it will project itself forwards and fly for quite a long distance.

⚠ The SNITCH Device should glow and be quite visible while flying. This is to encourage Aimee to throw it out of sight and take precautions when deploying it.

Deployed

The SNITCH Device will stick to the first surface it touches. It will then be activated and begin spotting nearby enemies.

⚠ If the SNITCH Device it hits a **Merc or Objective**, it will bounce off and fall to the ground.

Spotting

Once deployed, the SNITCH Device will use **line-of-sight** to spot enemy Mercs, although it has a **limited range**. Its range is larger than the Heartbeat Sensor, although not infinite – this is to stop the SNITCH being hidden almost completely out of sight up high and spotting Mercs from across the map. They should be within a medium range from each other.

ⓘ Once spotted by the SNITCH, the enemy Merc will be displayed on the HUD for Aimee and her team. This should be a **unique** icon to her ability.

Debilitated

When a Merc is spotted by the SNITCH, they are also debilitated. This causes them to take extra damage (rounded down) from enemy Mercs.

DEFAULT WEAPONS

Primary	Secondary	Melee
PDP-70	DE. 50 Pistol	Stilnotto Stiletto

HUNTER

OVERVIEW

Hunter is equipped with a high-powered prosthetic Crossbow, which he uses to hunt down and take out his prey with speed and precision. He also has access to EMP Bolts, which can disable enemy devices from afar, being the first and only ranged EMP Merc. This allows him to keep at a safe distance and engage his enemies with devastating fire-power and disruptive abilities.

GOALS

- To introduce a Recon Merc that is limited in spotting, but better at other utility for team-play.
- To introduce another EMP Merc with a ranged usage.
- To balance out community complaints of deployable stacking, with a solution to the problem.
- To introduce a new Merc ability weapon for the Recon Merc's, similar to the Revive Gun or Minigun.

USER STORIES

- As a player, I feel that the current EMP implementation on Phantom is too limited, and I would like a long or mid-ranged option for the mechanic.
- As a player, I feel that Recon Mercs are too good at doing the same thing, besides Phantom. I would like more variety to the class and way that they function.
- As a competitive player, I find the amount of deployables and unbreakable defences to be a real annoyance. I would like a Phantom alternative to dealing with these situations.
- As a player, I would like to play a new ability-based Merc weapon, like Sparks' Revive Rifle or Rhino's Minigun.

MERC DETAILS

Name: Hunter (also known as covertops_05)
Nationality: USA (Alaska)

Role: Mid/Long-range support and control of the battlefield using ability bolts
Behaviour: Hunter is a Merc of few words. He stalks his prey from high ground and hunts it down no matter if behind shields, corners or in sight.

Body Type: Medium
Health: 110HP
Max Sprint Speed: 420 units per second
Eye Height: 76 units

PERSONALITY & BACKSTORY

Hunter grew up in the Alaskan wilderness with his father Lieutenant Thomas Kallyhocus Sr. who for the duration of Hunter's childhood primarily made his living from fishing. His Father deeply regretted serving in the military. After witnessing first-hand, the effects of civil unrest caused by the rapidly destabilising world economy, and the heavy-handed government response he began to question his place in the army. He felt strongly that the army should be protecting the population not oppressing it. He also felt increasingly side lined by the government's increasing use of PMCs which he felt contributed to the situation. His military career ended when his wife was taken ill and he returned home to care for his her and infant son. She died a year later.

He took his duty as a single parent seriously, raising Hunter to take pride in his heritage teaching him to hunt, fish and survive in the wilderness. Whilst Hunter respected his Father, his Father's grief over the loss of his wife and regret over his time in the army made it hard for him to express his emotions. Hunter interpreted this distance as his Father's disapproval and dedicated himself to perfecting any skill he taught him. This dedication and early focus on training later led Hunter to become a word class marksmen and sniper. Thomas Kallyhocus Sr. raised his son with the expectation that he would follow in his footsteps and become a fisherman and withheld the fact he had been in the army the global economic situation put pressure on the family, and they struggled to make ends meet. By the time Hunter was eighteen his Father's health had declined, the years of hard physical labour exacerbating several old war injuries which were barely covered by his Father's medical insurance. Wanting desperately to help his Father and having little in the way of other opportunities, Hunter enlisted in the military to have the money to pay for his Father's treatment. The two fought and Hunter left for the army on bad terms, determined to earn the money to pay for his medical treatment and finally earn his approval.

Hunter served two tours in the Gulf, throughout this time he sent money home to help his Father. On his second tour he was caught in an explosion after attempting to help some stranded civilians. Initially the military thought he was dead and informed his Father, who took the news badly. His already bad health taking an even steeper decline.

Several months later Hunter was found alive. After he was injured in the explosion he was taken prisoner alongside several of the civilians. Using his survival skills, he was able to survive his imprisonment and keep all the hostages alive until he was able to mount an escape. The explosion, followed by the extended imprisonment without proper medical treatment caused permanent damage to Hunter's arm. After reaching safety Hunter was honourably discharged and fitted with a cybernetic arm.

On returning home just before Christmas, Hunter came home to find the family home empty. Stacked up in a pile were all the letters he'd sent home, however none of the cheques he'd sent had been cashed though each letter looked like it had been read many times. Whilst the house was deserted there was food in the house and his Father's bed looked slept in. His coat and hiking gear were missing suggesting he'd gone on a hunting trip. Hunter set out to look for his Father eventually spotting an area of disturbed snow near a cliff edge. Investigating further he realised that his Father had fallen, likely due to his ill health. Hunter's standard issue prosthetic performed poorly in the snow having been designed primarily for desert conditions. By the time he reached his Father, he was on the edge of death. Severely concussed his Father believed Hunter to be a ghost. He died in Hunter's arms ranting about how he had failed his son without realising his son had lived.

Seeing his Father die impacted Hunter. He felt let down by the poor performance of his prosthetic arm and blamed himself for abandoning his Father when he needed him most. In 2020 after years of wandering Hunter met disgraced former US Commander William Ridely in a remote bar in Alaska. Ridely now working for arm manufacturer Trifold offered Hunter access to an experimental prosthetic crossbow in exchange for his help. A former subordinate of his, Jesse H. Pierce had been discovered working as a Merc in London. Ridely had a little unfinished business with Pierce and realised that Hunter could be key to getting his revenge.

PROSTHETIC CROSSBOW
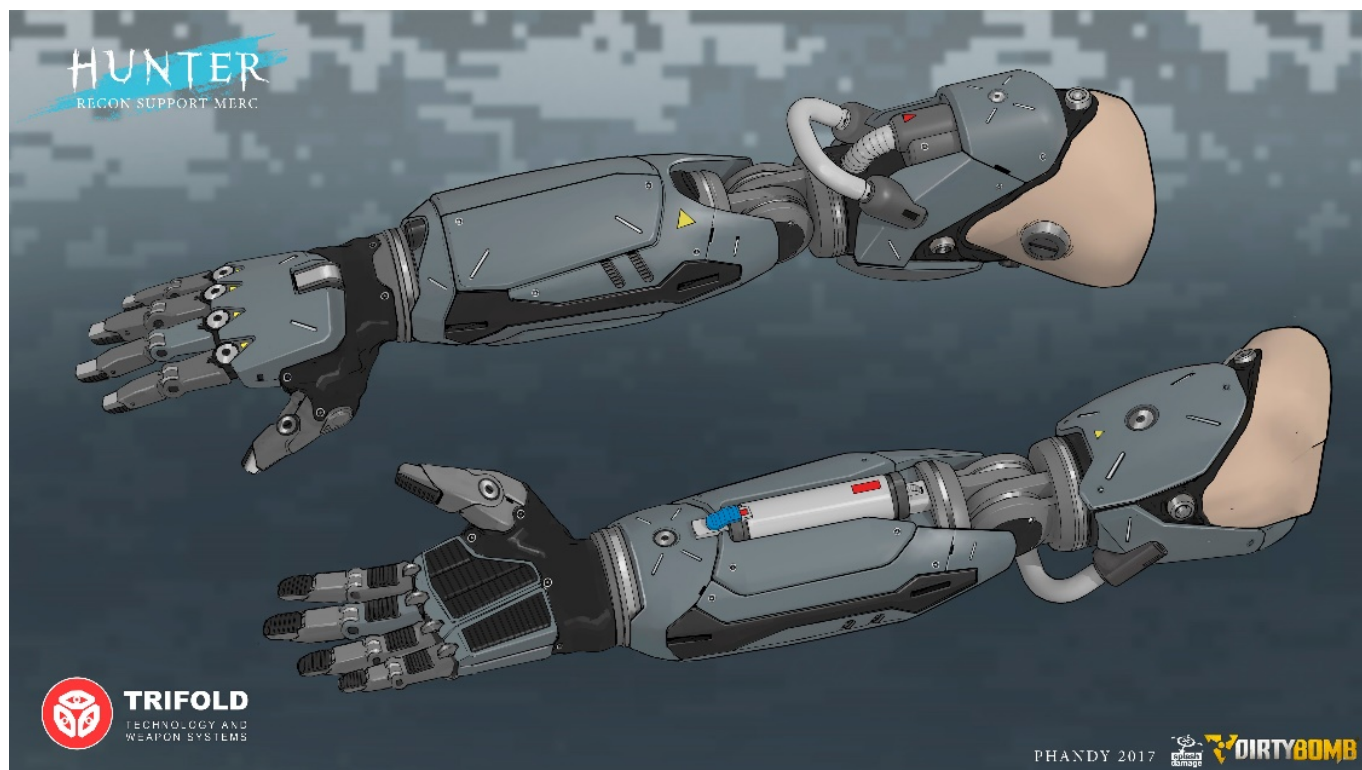
Hunter's **Primary Ability** is the **Prosthetic Crossbow (Weapons\Crossbow_01)**. It is a highly advanced weapon that is integrated in his arm. It unfolds if selected and folds back in if Hunter switches back to normal weapons.

The crossbow can be selected with 'Quick Ability 1' (Q) and deselected by switching weapons. Raising and lowering the Crossbow will take 0.333 seconds. This is in line with other ability driven weapons. Hunter's Crossbow shoots bolts. Bolts are **projectiles** and fly in a slight curve (small drop-off). They will be small and are hard to shoot down but they will be **blocked** by **Guardian's Sky Shield** and **Turtle's Shield**.
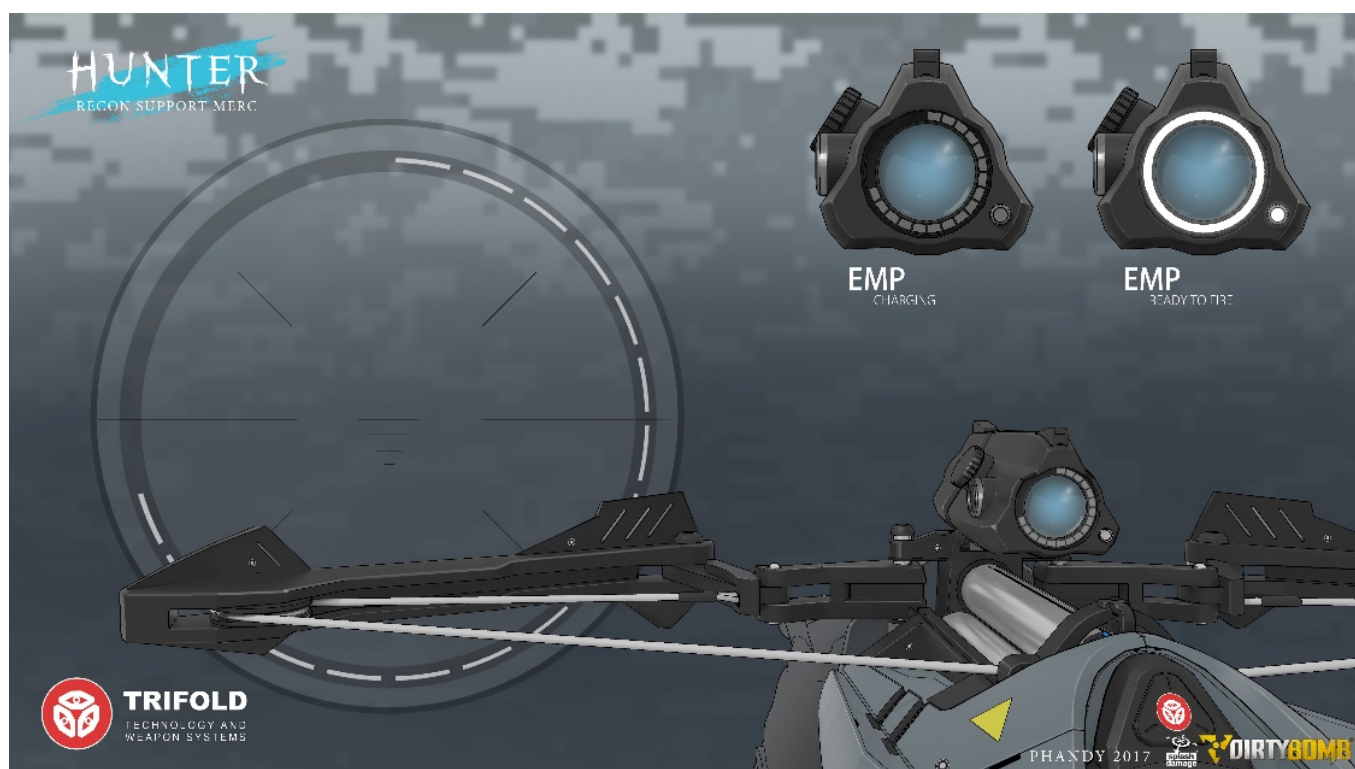
The Bolt uses real physics and has a slow **drop-off** over time.
- **Short-Range** (0 - 500 units)
  - Headshot
- **Mid-Range** (500 - 900 units)
  - A shot to the head would hit the upper body of a player
- **Long-Range** (900 - 2700 units)
  - A shot to the head would hit in the leg over that long distance.

Standard Bolt

His default ammunition is the **Standard Bolt** that will spot enemies for a short time if they get hit by it. Hunter's Standard Bolt is a **skill driven** spotting ability which distinguishes it from other spotting abilities.

> **Spotting** is a mechanic that highlights enemy players for a short time. The way of spotting enemies and the spotted time depend on the device (Heartbeat Sensor, Aimee's SNITCH, Redeye's IR Goggles, Hunter's Standard Bolt).

EMP BOLT
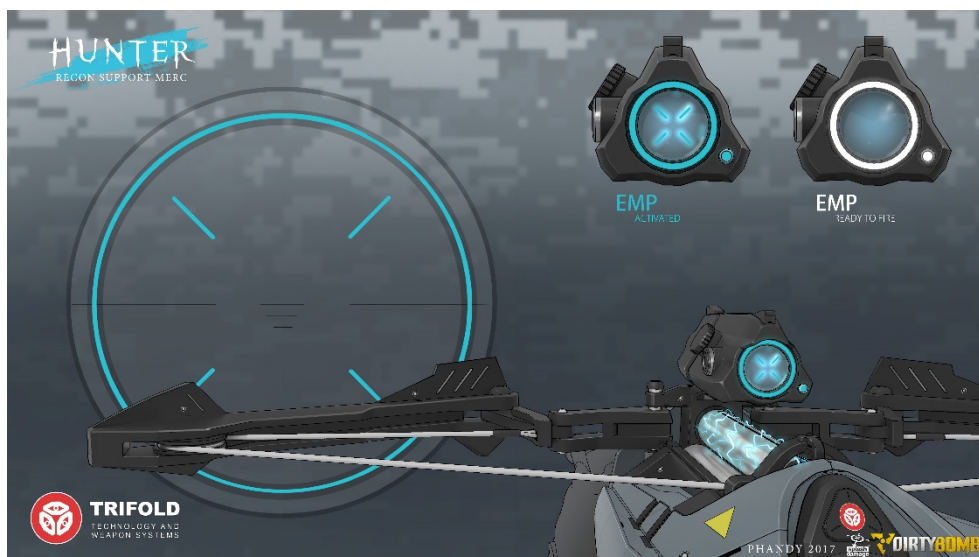
EMP Bolt will emit an EMP on impact, disabling all deployables and devices within a medium-sized area-of-effect. Unlike Hunter's Standard Bolts, it has a lengthy cooldown on its use.

Hunter's **Secondary Ability** is the **EMP Bolt**. It is (de)selected by pressing 'Quick Ability 2' (E).

Selecting it will switch from the Standard Bolt to the EMP Bolt. Once fired it will switch back to the Standard Bolt automatically and the EMP Bolt goes on cooldown. Alternatively, Hunter can switch back to the Standard Bolt by pressing quick ability 2 ('E').

The **EMP Bolt** will **explode** on **impact**, unleashing an **EMP wave** that disables all electronic devices in the world for a short time within a **short range**.
The **EMP wave** is a once and done effect. Placing a device inside the range won't disable it, as it should be a singular wave upon impact.

TACTICAL SCOPE

The Crossbow has a unique **Tactical Scope** attached. It can be selected with the right mouse button (default key) and allows players to hunt down their prey. It's primary function is to 'charge' the Standard Bolt, which will deal more damage, the longer that Hunter is scoped in for.

Upon using the Tactical Scope, it will begin to charge from **100% to 200%.** This shows the **damage multiplier** that will be applied to Hunter's Standard Bolt, and it should take a maximum of **1.5 seconds** to charge fully.

> Note: The charge should **not** initiate while the Bolt reloading animation is still playing.

The scope serves a second purpose. It is used to **communicate** the **cooldown** of the **EMP Bolt** (Secondary Ability). The table below shows the different states.
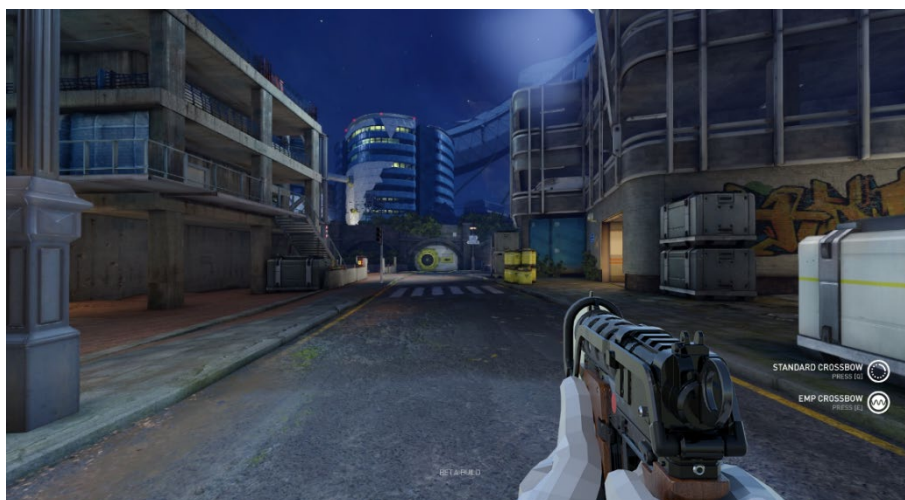
> Note: You cannot see the cooldown while being in EMP mode because the Crossbow switches back to the Standard Bolt after firing the EMP Bolt.

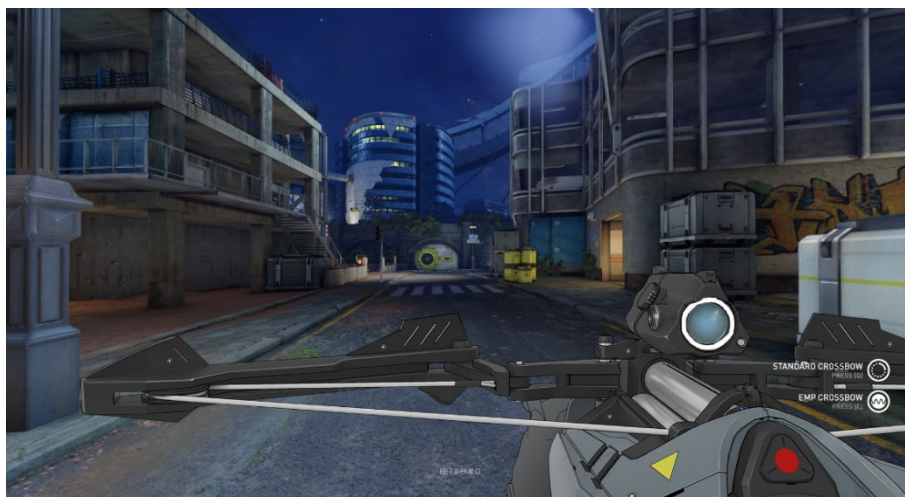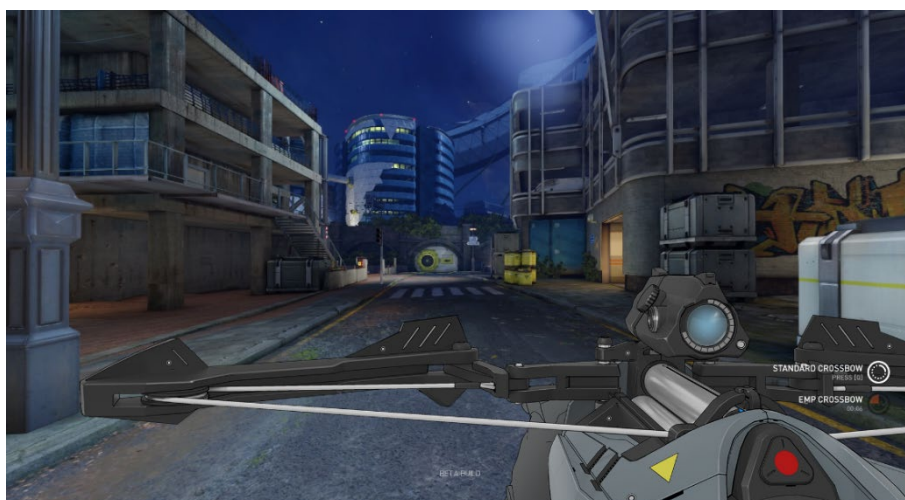|	Standard Bolt (Q)	EMP Bolt (E)
Cooldown		
Ready		

IN-GAME HUD

1. Crossbow Holstered

2. Crossbow Equipped (Standard) with EMP Ready

3. Crossbow Equipped (Standard) with EMP on Cooldown

4. Crossbow Equipped (EMP) Armed and Ready to fire

DEFAULT WEAPONS

Primary	Secondary	Melee
Ryburn MP	Arevarov 9	Ulu

PHANTOM

OVERVIEW

Phantom is a unique Merc that utilises his Refractive Suit to disappear on the battlefield. He specialises in sneaking behind enemy lines, defence disruption and breaking the 4th wall. He has an EMP Wave device built into his Refractive Suit, that he can set off while cloaked, or when uncloaking to shut down strong enemy defences – this makes him an ideal pick to shutting down strong choke-points in maps.

GOALS

- To create a Merc that rewards a tactical and stealthy play-style, without being an "annoying assassin".
- To provide players with an alternate method of team-play in Dirty Bomb with players of different Types o' Skill.
- To improve community and competitive sentiment towards a historically fluctuating over- and under-whelming Merc.
- To bring a new and unique play-style and set of abilities to the table.
- To build upon Phantom's already-outstanding personality and traits.

USER STORIES

- As a player, I want a reconnaissance Merc that suits my tactical and stealthy play-style.
- As a new player, I want to see Mercs that cater to different – maybe unconventional – FPS play-styles that I can excel in.
- As an American player, I would like to see Mercs from my own region that I can identify with.
- As a player, I would like a Merc that rewards defensive disruption and infiltration.
- As a player, I want Phantom's playstyle to be emphasise Dirty Bomb's fast-paced gameplay, not hamper by it.

MERC DETAILS

Name: Phantom (also known as CovertOps_03)
Nationality: USA – American
Age: Far too old to be playing ninja-assassin.

Role: Front-line disruption and infiltration.
Behaviour: Phantom will sneak around the enemy and disrupt their defences from within, then strike hard when they are distracted.

Body Type: Medium
Health: 120 HP
Max Sprint Speed: 410 units per seconds
Eye Height: 76 units

PERSONALITY & BACKSTORY

Phantom was born in the suburbs of Jacksonville, Florida. His parents both worked long hours, which meant he spent a lot of time after school in his cousin's VHS rental shop. This led to Phantom watching a huge variety of incredibly violent 80s action films, imported martial arts dramas and Mexican soap operas.

Initially Phantom's aim was to become a stunt man, however his inability to give up the limelight led to him getting fired from several straight to TV action films, a car advert and a New Year's Day parade float. Stung by his rejection Phantom decided to prove himself on a real battlefield.

Phantom joined the US army looking for glory, what he got was more people telling him what to do. Unfortunately, real battlefields don't work like movies. Phantom's ability to survive was almost as inexplicable as his behaviour. He was frequently reprimanded by his Commander William Ridely for disobeying orders which he disputed giving the excuse that he wasn't really listening to them in the first place. He was sent on several very dangerous missions with the hope he wouldn't come back, somehow, he always did even if the rest of his unit didn't.

After problems with another solider led to a painful and unnecessary medical procedure, Ridely took extreme measures and volunteered Phantom to take part in an experimental Refractive Suit battle-suit test program. Returning the favour, Phantom promptly stole the suit and used it to plant incriminating evidence/livestock in his former Commanding Officer's quarters. Ridely was discharged from the army and spent the following years nursing a grudge, he finally found employment with Trifold and has begun looking for a way to get his revenge. Phantom hasn't given his actions a second thought, it might just be how Phantom is, or it might be the fact being an untested prototype his stealth field may have unintended side effects?

HIS OWN WORDS...

"People call me a backstabber. Hell, I'll stab you in the front if you want. I'm an expert in tactical reconnaissance and infiltration – I disappear, I kill things, and I will shut your !@*$ down.

I'd say don't get on my bad side – but every side is my good side – unless you're on the receiving end of my Katana... Then I guess you're !@*$ outta luck. I mean, who says to someone "Hey, we need you to test this thing that makes you INVISIBLE. So we can't see you – at all. As in, completely invisible. We trust you though." and expect them to not just walk off with it? Come on, man. It was pretty funny though, you should have seen the look on their faces. Beep – undercover I go. Zap – doors get disabled. Poof – away I go with the cloak. Really, a real genius idea that was."

REFRACTIVE SUIT

Phantom's primary ability is the Refractive Suit, which renders him almost entirely invisible when active. When activated, it also begins to charge his EMP Wave.

Active

Phantom's Refractive Suit can be activated by pressing 'Q' (Ability Slot 1). This will render him **almost entirely invisible**.
While cloaked, Phantom can switch weapons freely, although attempting to attack will deactivate his cloak.

Deactivating

When Phantom deactivates his cloak (or attacks to force deactivation), he should **decloak instantly**, meaning he should rely on the element of surprise to take down his enemy. If the **EMP Wave** wasn't triggered manually it gets triggered automatically.

Spotting Interactions

While cloaked, Phantom cannot be spotted by other Recon Mercs. Activating his Refractive Suit while spotted will also instantly clear any 'spotted' state he currently has.

Important: A minor exception to this rule is Redeye. While he cannot be "spotted" for his team-mates, Redeye is still able to see Phantom while he is cloaked, with his IR Goggles.

Dying While Cloaked

If Phantom is killed while cloaked, the cloak should instantly deactivate. The EMP Wave should **not trigger** if his cloak is deactivated from being downed.

> ⚠️ A **full** cooldown should be applied, regardless of the amount of Refractive Suit duration is used.

EMP WAVE

EMP Wave will begin charging when Phantom activates the Refractive Suit. Once it has reached full charge, Phantom can use it at any time while cloaked (and it will not decloak him) – however, if it is not used, it will automatically trigger upon Phantom deactivating his Refractive Suit.

Charging

When Refractive Suit is activated, EMP Wave begins charging. After several seconds, the EMP Wave can be manually activated.

> ⚠️ EMP Wave can only be triggered **once per use** of the Refractive Suit. The player has the option to trigger it manually, or automatically upon deactivating the cloak.

Manual Activation

Manual activation can only be triggered from cloak. Manually activating the EMP Wave will **not** disable Phantom's cloak. It can be activated by pressing 'E' (Ability Slot 2).
No visual 'pulse' as to not give away Phantom's location.
EMP'd deployables should have a visual effect to indicate they are not functioning (ie. disabled).
Deployables effected should instantly deactivate their effect.
Function: The EMP Wave should originate from Phantom's current position. It will create an AoE around him and disable everything within this AoE.

Automatic Activation

If Phantom has not used his EMP Wave while cloaked, then it will automatically trigger upon deactivating cloak. It has the same functionality as if it were manually triggered.

Audio

EMP should have a set audio sound but functions differently depending on the situation.

> **EMP Wave while cloaked:** A fairly quiet 'activation' sound. Only Phantom should be able to hear this.
> **EMP Wave while deactivating cloak:** A different deactivation sound to normal, which indicates an EMP Wave has been activated from Phantom's cloak.

Disabled Deployables

When a deployable is disabled, the following criteria should be met:

- Disable for **5 seconds**.
- *This is to retain consistancy across the board, regarding EMP. Regardless of what merc or ability EMP's a deployable, it should always be the same length of time (ie. 5 seconds)*
- Deployable should be 'spotted' for Phantom and his team-mates. This should help boost his team-player attribution and provide his team-mates with useful information about the defences behind enemy lines.
- EMP'd deployables should have a visual effect to indicate they are not functioning (ie. disabled).

DEFAULT WEAPONS

Primary	Secondary	Melee
Blishlok	Smjüth & Wetsman .40	Katana

PHANTOM REWORK

OVERVIEW

Phantom is a powerful operative who uses his unique Refractive Armour to disappear on the battlefield. He can easily re-position himself even under enemy observation, allowing him to attack and disrupt structures without warning. His main weapon is the element of surprise.

With Hunter releasing soon, it's the right time to get Phantom back into shape to fit his character and the rest of the game.

USER CONCERNS

- As a player that enjoys sneaking around the battlefield, I am easily spotted when using my Refractive Armour.
- As a supportive player, I feel that I don't really contribute to the success of my team.
- As a player, I want to have the choice of when I am using my EMP ability.
- As a player who recently bought Phantom, I don't understand his abilities.
- As a player, I am worried that Hunter outclasses Phantom's EMP ability.

GOALS

- **STEALTH** - Shift Phantom from being a mixed bag to be primarily a Silent Operative what fits better his personality and backstory.

- **SUPPORT** - Keep and extend on his supportive elements to involve him more in team play without sacrificing his play style.

- **CLARITY** - Create a better understanding of his kit.

- **CONSISTENCY** - Make EMP consistent to allow for easier balancing and a clearer understanding of the ability (Hunter).

REFRACTIVE SUIT (Q)

The Refractive Suit (*formerly Refractive Armour*) is a powerful tool that allows Phantom to sneak around the battlefield and get behind enemy lines.

Stealth

- Phantom goes into cloak by pressing 'Quick Ability 1 (Q)'
  - He gets nearly invisible (audio scales with visuals)
  - Minimal increased visibility when running
  - Totally invisible when standing

- Phantom cannot be spotted while in cloak
  - Why: An invisible dot running around is confusing for new players. Redeye can still see him with his IR Goggles, but he won't be spotted.

- Phantom must hold his cloaking device while he is in cloak and therefore cannot attack out of cloak. He must uncloak by cycling weapons or pressing 'Quick Ability 1 (Q)' again.
  - Why:
    - It's a short delay that allows us to make him nearly invisible to encourage players to use him and run around on the battlefield instead of just standing in corners
    - It also reduces the frustrating part of playing against him and being killed right out of cloak without being able to react to it.

Clarity

- Phantom's bonus armour gets removed
- Health increased to 120HP
- Getting shot doesn't reduce the cloak duration
  - Why:
    - One of our goals is making mechanics simpler and easier to understand while keeping the functionality untouched. In this case we are removing the not communicated bonus armour but increase his HP and remove the reduced cloak duration on hit.
    - Because of the change above we are renaming Refractive Armour to Refractive Suit. This underlines the change.

EMP WAVE (E)

The EMP Pulse is a essential part of Phantom's Refractive Suit. It charges up when he enters cloak and unloads when he leaves cloak.

Support

- The EMP Pulse needs charging up before it can be used
  - The EMP Pulse starts charging up as soon as Phantom enables his Refractive Suit
  - Charging up takes around 3 seconds
  - Once ready it can be triggered manually (pressing E) or gets triggered automatically when leaving cloak
  - The EMP Pulse can only be used once per cloak

- o Why:
  - ▪ It was often brought up that we could simply separate the abilities but we have decided to keep the EMP linked to the cloak because it forces selfish people that are only interested in the cloak and the sneaky part of Phantom to use the EMP ability and therefore support the team (e.g. Skyhammers that don't give ammo or Medics that don't give health and don't revive).
  - ▪ Forcing the EMP on players will have no negative impact. They can play as lone wolf but are still helping their team.
  - ▪ People that are interested in helping their team can trigger the EMP manually.
  - ▪ Not a real reason but it gives us enough flexibility for balancing the EMP ability without changing the cloak

Clarity

- Standard HUD element on right side shows the status of the EMP
  - o Greyed out when out of cloak
  - o Starts charging up when entering cloak
  - o White when charged up
  - o Greyed out once used
- Disabled deployables are highlighted for team members (think of a Bomb Squad for disabled deployables)
  - o Why: This information allows Phantom to have a bigger impact on the game, because information is key. It tells team mates if they can enter a room without being attacked by a turret or mines.

Consistency

Changing Phantom allows us to redefine what EMP means in our game. Hunter is shifting the focus from an ongoing, long EMP auras to tactically used EMP pulses that should reduce the overall amount of EMP while making EMP more effective.

Attribute	Phantom (now)	Phantom (new)	Hunter
Type	Consistent Aura	Pulse	Pulse
Radius	large	medium/large	small/medium
Duration	ongoing	on hit	on hit

Why:
- Both Mercs use the same mechanic what makes it easy for players to understand. You have played one you know the other.
- They will be balanced by radius and cooldowns. Again, easier to understand for new users instead of introducing more complex mechanics.
- Easier to balance on our end.

REDEYE

OVERVIEW

Redeye is a medium-to-long ranged marksman, with the unique ability of IR Goggles, capable of easily spotting and locating enemy Mercs. He's also armed with a Smoke Grenade, capable of blocking line-of-sight for all Mercs, allowing him to pick off enemy Mercs through the Smoke while they are unawares. He can provide his teammates with cover and cause disruption for the enemy.

GOALS

- To introduce a Merc, capable of creating disruption for the enemy and cover for allies.
- To introduce a Merc, capable of locating enemy Mercs easier with an advanced vision ability.
- To implement a Merc that plays a marksman role, as opposed to a long-ranged sniper.
- To implement a Smoke Grenade ability.

USER STORIES

- As a player, I would like a Merc capable of creating their own form of cover.
- As a player, I want a sniper that allows me to pick-out enemies easier.
- As a player, I want a mid-ranged marksman Merc, as opposed to solely a long-ranged sniper.
- As a Counter Strike player, I want a Merc with a smoke grenade ability.

MERC DETAILS

Name: Redeye (also known as CovertOps_04)
Nationality: Australian

Role: Mid- to long-ranged marksman with deployable smoke to disorient and confuse enemies.
Behaviour: Redeye specialises in disruption and confusion with his Smoke Grenade – capable of blocking line-of-sight in critical areas of the map. He can use his IR Goggles to spot enemies through the smoke and aid his teammates, then quickly dispatch them with his high-powered long-ranged rifles.

Body Type: Medium
Health: 120 HP
Max Sprint Speed: 400 units per second
Eye Height: 76 units

PERSONALITY & BACKSTORY

Redeye served in the Australian SAS for over a decade, he continuously earned field promotions for outstanding bravery. His willingness to take risks caused as many problems as it solved, and whilst all the people he saved are grateful; his commanders didn't appreciate a soldier who consistently and wilfully ignored orders. Having found himself in trouble a little too often he found he was discharged at the rank of corporal but without a pension. Redeye had ambitious plans for his retirement and he realised that he would have to find another revenue stream.

This led him to take up Merc work, whilst the work is dangerous the pay is superb. Initially he took missions in Australia. When the Dirty Bomb incident occurred, Redeye realised it was the perfect opportunity to make a lot of money in a very short time. Now he's back in action, he can't imagine doing anything else. The weather's not as good in London, and the levels of radiation are far higher but Redeye's got plans and he'll do anything to achieve them.

HIS OWN WORDS...

"Pleasure's all yours, believe me."
"The sight of you offends mine eye..."
"I spy...with my red eye...something beginning in...BANG"
"If you're not yet dead, I'll be with you in just a minute."
"I'm the Aussie digger with the crazy dagger."

"When I call you "Mate", mate, that doesn't mean we're Good Mates. See, it could just mean I know you. Or it could mean I've just met you. Or it could mean I've been planning on killing you for months now. Now, obviously, I wouldn't do that. Because we're mates, right? You're my mate, and I'm your mate. Not in the Biblical sense. Although the night is young, who knows? Steady on, mate, that was a joke. But seriously, how about it? Nah, kidding mate, kidding. And if I wanted to kill you, I'd have done so already, from distance, turned your head into pink mist. But I didn't. Haven't. Yet. And, let's face it, if I did, there's not a great deal you'd know about it, and still less you could do about it, so how about you just buy me another beer and we'll call it quits? Mate."

IR GOGGLES

Activating

Redeye can activate his IR Goggles by pressing 'E' (Ability Slot 2) or by pressing '5'. The activation button does not need to be held – it should function as a single-press toggle.

Active

When the IR Goggles are active, the cooldown will be drained over time. When maximum cooldown is reached, the IR Goggles will automatically toggle off.

⚠ The IR Goggles can be reactivated again at any time, provided that the cooldown isn't full. The cooldown increase will resume from its current point.

Vision

When Redeye has his IR Goggles activated, his surroundings become monotone and less visible. However, enemy **Mercs should be highly visible**, and appear as bright white silhouettes.

Spotting

While active, Redeye will spot enemy Mercs who are within his line-of-sight. Phantom, if cloaked, is not spotted.

⚠ When an enemy Merc leaves Redeye's line-of-sight, or his IR Goggles are deactivated, they will remain spotted for a further 4 seconds.

Smoke Interaction

While IR Goggles are active, Redeye can see through his Smoke. This can allow him to strategically position himself to take out the enemy.

ⓘ Redeye is also capable of seeing through ally or enemy Smoke too.

SMOKE GRENADE

Throwing Smoke Grenade

Redeye can throw his smoke Grenade at medium distance, allowing him to set up cover and disruption throughout the map.

Deploying Smoke

Smoke will deploy once the Grenade has landed. This should ensure Smoke does not deploy mid-air or in unintended spaces.

⚠️ Smoke should not deploy from the Smoke Grenade until it comes to a total stop.

Smoke Functionality

When Smoke is deployed, it will create a large area-of-effect, which should be filled with opaque Smoke. The Smoke has the following timings:
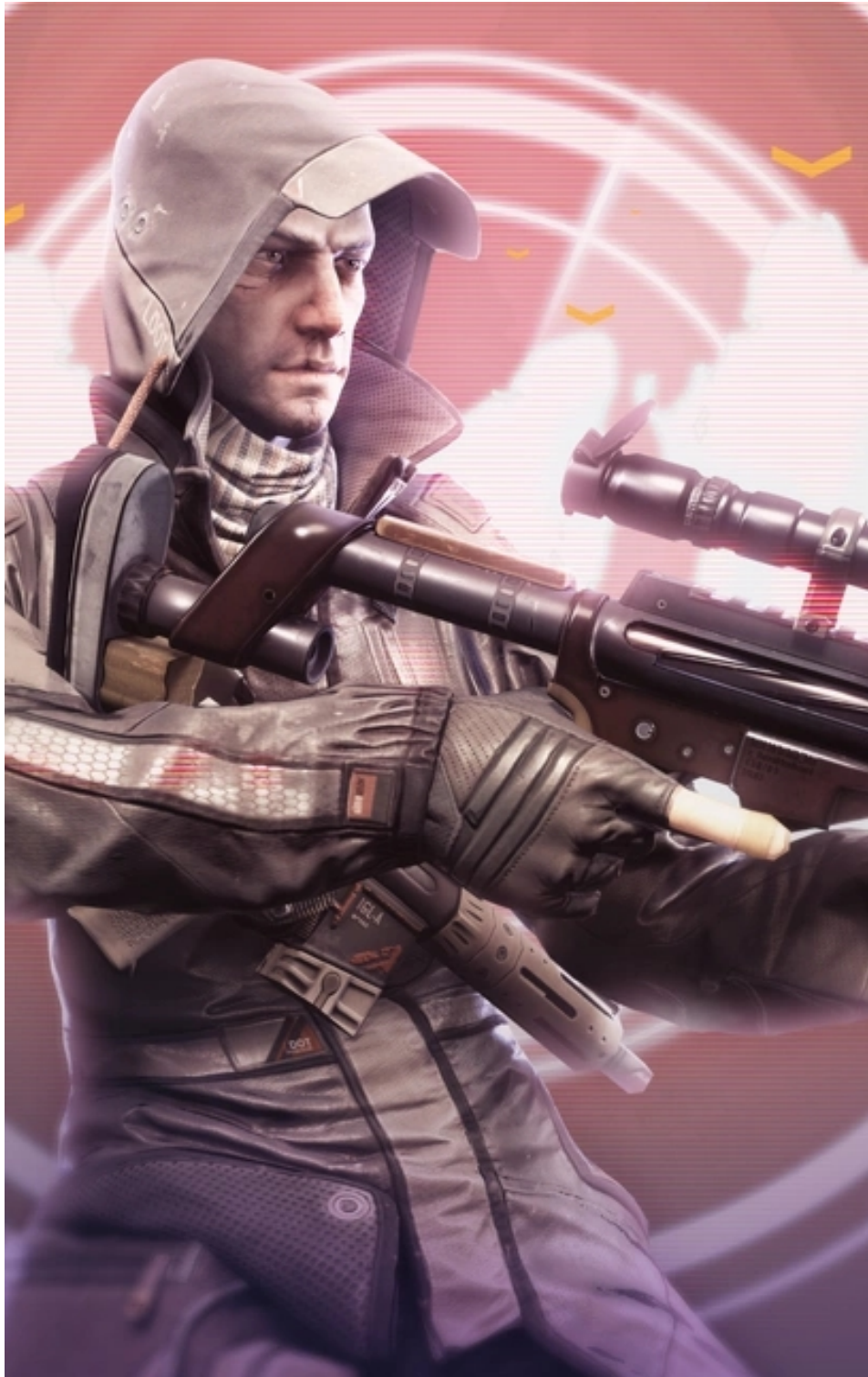
- Smoke deploys in x seconds (fade in from 0% to 100% opacity)
- Smoke remains fully deployed for a total time of x second
- After x seconds, Smoke should fade out in x seconds (fade from 100% to 0% opacity)

ℹ️ Nearer the edge of the Smoke, the opacity should be lower than near the centre.

DEFAULT WEAPONS

Primary	Secondary	Melee
Grandeur SR	Caulden	Kukri

VASSILI

OVERVIEW

Vassili is a long-ranged sniper with exceptional killing-power. He is capable of spotting enemy Mercs for his teammate with his Heartbeat Sensor, which doesn't rely on line-of-sight, unlike other spotting abilities. He is a base-line sniper that fills a familiar and easy-to-learn role for sniper players in similar games.

GOALS

- To introduce a sniper Merc that is easy to use and familiar to FPS players.
- To introduce a Merc capable of combat from incredibly long distances.
- To implement a spotting mechanic, which can spot enemies through walls.

USER STORIES

- As an FPS player, I want a sniper Merc that is familiar to other FPS I might have played.
- As a player, I would like a Merc capable of fighting at an extremely long distance.
- As a player, I want a way to spot enemies through walls, and not necessarily rely on line-of-sight.

MERC DETAILS

Name: Vassili (also known as CovertOps_01)
Nationality: English

Role: Long-ranged sniper, capable of spotting enemies in a small radius for his teammates.
Behaviour: Vassili specialises in executing kills fast, with pin-point accurate headshots and high firepower. He should hang back and provide cover to his teammates from a distance, as well as spotting enemies for his team, with his Heartbeat Sensor – unlike other spotting Mercs, he can spot enemies through walls.

Body Type: Medium
Health: 110 HP
Max Sprint Speed: 420 units per second
Eye Height: 76 units

PERSONALITY & BACKSTORY

Vassili was the youngest of two children. A talented writer, he also showed a keen interest in shooting thanks to his Mother who often took her children with her to the gun range.

While reading English at Cambridge, Vassili was asked to help with a particularly spectacular student prank. Long story short: everyone saw the results, nobody saw it being done, nobody got hurt, and nobody could prove anything. One of the investigating college Dons suspected an unusual talent, and called in a friend of a friend perhaps not entirely un-attached to one of the British intelligence services.

Vassili trained as a sniper for the British government, he was prohibited from disclosing his true career. This caused tensions with his parents who were led to believe that Vassili had dropped out of Cambridge to become an ice cream man in Skegness. The tensions between Vassili and his family led to a breakdown in their relationship and he fell out of contact.

Vassili excelled at his job and was promoted several times. After another agent was taken sick Vassili stepped in last moment to take over his mission; an assignment ordered by the government against a radical politician who insisted that the CDA were lying about their activities in London. Vassili lined up his shot agitated at the late change in mission orders. He was about to take his shot when he realised his target was in fact his older sister who had since married and changed her name. He missed and fled the scene.

His superiors were extremely angry at his failure and refused to admit sending Vassili to kill his own sister was just a tad too cold blooded. When his superiors failed to back down Vassili took the decision to head to London and take on Merc work. It had become obvious that his sister was really onto something and Vassili resolved to find the evidence to back her up.

HIS OWN WORDS...

"Lone gunmen aren't always lonely gunmen, OK?"
"This is the bit where I'm supposed to be impressed, right?"
"I'm a sniper. I'm sniper-er than the other snipers. I'm the sniperest sniper there is."

"I like to keep my distance, know what I mean? Take in the big picture. No point going toe-to-toe with some berserker with a big knife when I can pick them off from a hundred yards away, no muss, no fuss. Observe, Report, Shoot Between The Eyes. Also, my little Heartbeat Sensor. Nice little bit of kit, that. Like having another pair of eyes in the back of your head, or streets away, wherever you can hide it.

I take care of business. Not like some I could mention. I run a tight operation. No mucking about, no showing off, no mess. I can't stand mess. Some people you'd think they were toddlers at a tea party. Battlefield's untidy enough without adding to the mess. Make everything clean and neat. One shot, nice clean hole in a forehead, bob's your uncle. Leave me to it, OK? No...slaps on the back, no team spirit hugs, no high fives. We're all professionals, let's just leave ourselves alone to do our jobs, OK? Right. Good."

HEARTBEAT SENSOR

Throwing

Vassili can throw the Heartbeat Sensor a fair distance (like a Grenade). It has a short arming animation before he can throw it. The Heartbeat Sensor should **not** activate until it has landed. It should not be able to spot enemy Mercs while travelling.

Execution

- Pressing **4** equips the Heartbeat Sensor
- Holding **Fire** 'cooks' the Heartbeat sensor, releasing **Fire** throws it
- Holding **Q**:
    - Lowers the current weapon/item/tool
    - Begins 'cooking' the Heartbeat sensor
        - There is no fuse time, the sensor only activates once it comes to rest
    - Releasing **Q** throws the Sensor
    - The Sensor is lower, and the previous weapon/item/tool is raised
- When there are 0 charges available (once thrown) the Heartbeat Sensor should be automatically lowered to the previously equipped item

214.

Sensor Mechanic

The Heartbeat Sensor comes into effect once it has landed and come to a stop – this is so that it **cannot** spot enemies while moving. A visual area-of-effect should be displayed around the Heartbeat Sensor when it lands and activates. This should disappear after a few moments.

While active, the Heartbeat Sensor should **flash periodically**, to indicate its position. It should be possible for a player to locate it and destroy it, encouraging good placement by Vassili.

- Spotted Enemy Players become visible on the **Minimap** and on the **HUD with an IFF**
- The Sensor sends out a pulse every x seconds for a Life Span of x seconds
    - The Life Span should only begin from the time of the first pulse, not from the time of the throw
- Each Pulse spots nearby players for a duration of x seconds
- Each Pulse has a radius of x units
- When a player is spotted by a pulse, the Sensor emits an audible noise to indicate this
    - This allows enemy players to track down the device and destroy it
- The Sensor itself can be destroyed easily by enemy players
    - Destroyed Sensors no longer emit any Pulses

Destroyed

The Heartbeat Sensor will destroy itself at the end of the lifespan. It can also be destroyed by taking damage from bullets or explosives.

- The Heartbeat Sensor has a very low amount of health. It should be very easily destroyed.

DEFAULT WEAPONS

Primary	Secondary	Melee
MoA SNPR-1	MP 400	Stilnotto Stiletto

MERC ONE-SHEETS

OVERVIEW

Merc One-Sheets allow the development team to view all the characteristics of a Merc on one screen. They are created (in the best case) during the design phase, before the actual development of a Merc starts. It should help the development team (especially Art and Audio) to find the right style for a Merc.

This approach to defining character characteristics was directly inspired by/stolen from the brilliant GDC 2017 talk "Animating an Agent of Mayhem" by Michael Jungbluth of Volition. They allow us to distinguish and define each character, consistently aligning their personality, appearance, attitude, in-game animations and tactical role.

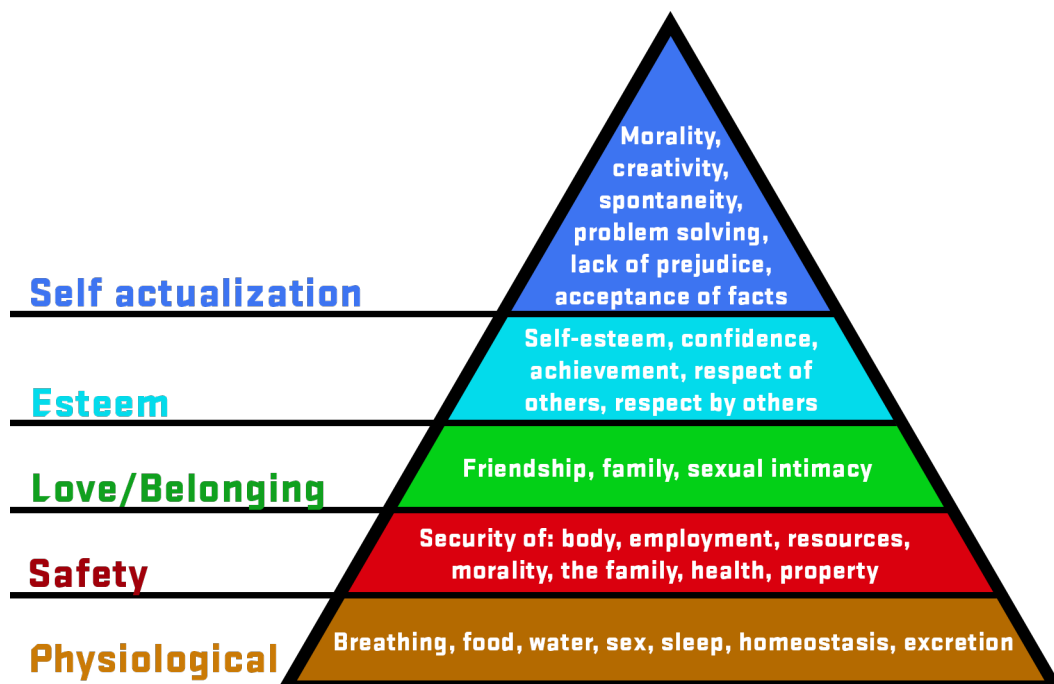**"Image"** is the defining strength of the character
"Must Have" means their must-have defining gameplay characteristic.
"Secret" means the character's inner motivation, not always something they'd admit or share.
"Pitfall" means potential pitfall we could fall into making this character, the thing we most need to avoid when designing/implementing them. If we mess this up, this is what players will assume we were aiming for. These will often be clichés, stereotypes and/or characters from media we are trying to avoid evoking, absolutely not what we're trying to achieve.
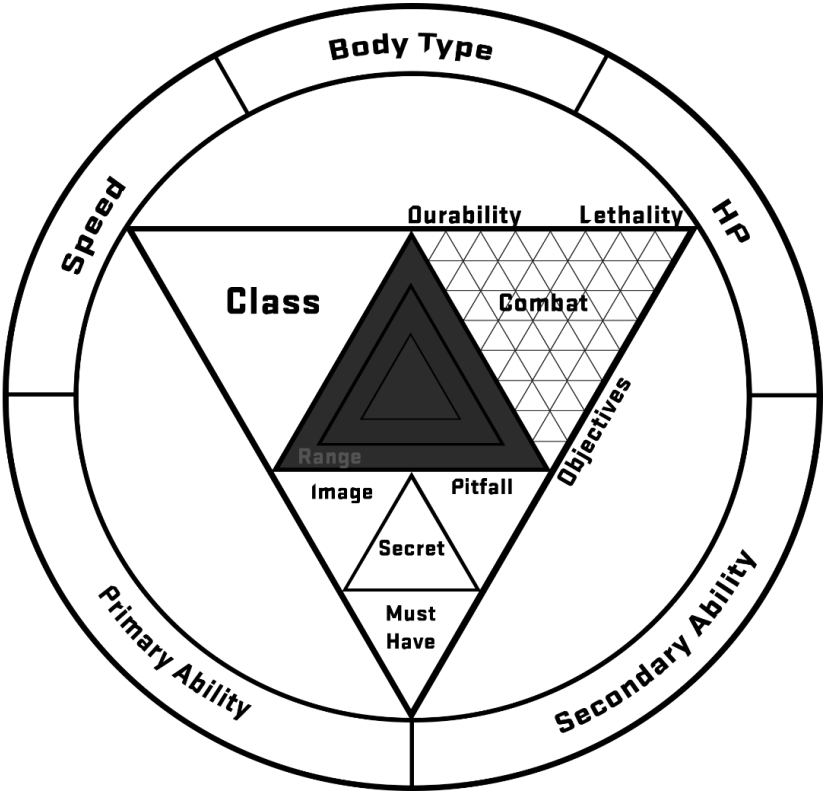
MASLOW'S HIERARCHY OF NEEDS

A quick look at the fundamental needs of the Merc and what drives them. This is portrayed in the shape of a pyramid with the largest, most fundamental levels of needs at the bottom and the need for self-actualisation and self-transcendence at the top

Self actualization — Morality, creativity, spontaneity, problem solving, lack of prejudice, acceptance of facts

Esteem — Self-esteem, confidence, achievement, respect of others, respect by others

Love/Belonging — Friendship, family, sexual intimacy

Safety — Security of: body, employment, resources, morality, the family, health, property

Physiological — Breathing, food, water, sex, sleep, homeostasis, excretion

CHARACTER CIRCLE

Merc abilities, specs, class and brief backstory

Body Type

Speed

HP

Durability   Lethality

Class

Combat

Objectives

Range

Image   Pitfall

Secret

Must Have

Primary Ability

Secondary Ability

PERSONALITY & ABILITY GRID

PERSONALITY

Reserved

Lawful

Chaotic

Showy

ABILITY

Modern

Teamwork

Loner

Futuristic

NEEDS

Self actualization — Morality, creativity, spontaneity, problem solving, lack of prejudice, acceptance of facts

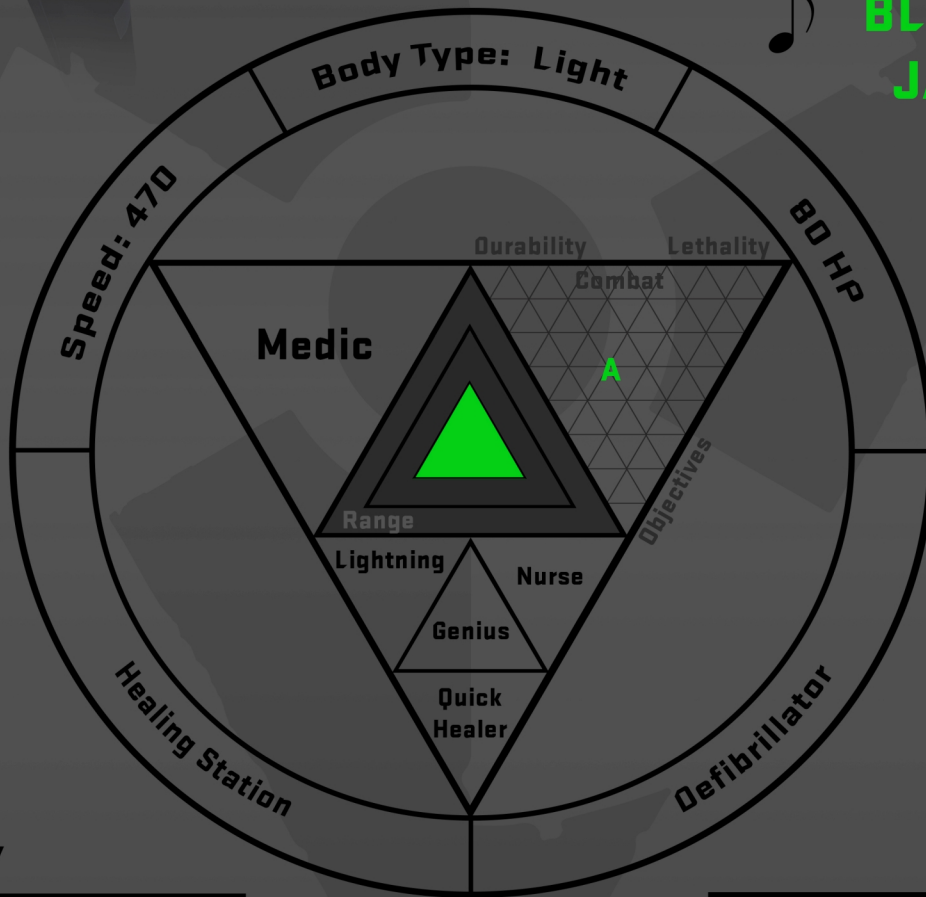Esteem — Self-esteem, confidence, achievement, respect of others, respect by others

Love/Belonging — Friendship, family, sexual intimacy

Safety — Security of: body, employment, resources, morality, the family, health, property

Physiological — Breathing, food, water, sex, sleep, homeostasis, excretion

♩ BLUES/ JAZZ ♫

Body Type: Light

Speed: 470

80 HP

Durability   Lethality
Combat
Medic
A
Range
Lightning   Nurse
Genius
Quick Healer

Objectives

Healing Station

Defibrillator

PERSONALITY

Reserved

Lawful   A   Chaotic

Showy

ABILITY

Modern

Teamwork   Loner
A

Futuristic

NEEDS

Self actualization — Morality, creativity, spontaneity, problem solving, lack of prejudice, acceptance of facts

Esteem — Self-esteem, confidence, achievement, respect of others, respect by others

Love/Belonging — Friendship, family, sexual intimacy

Safety — Security of: body, employment, resources, morality, the family, health, property

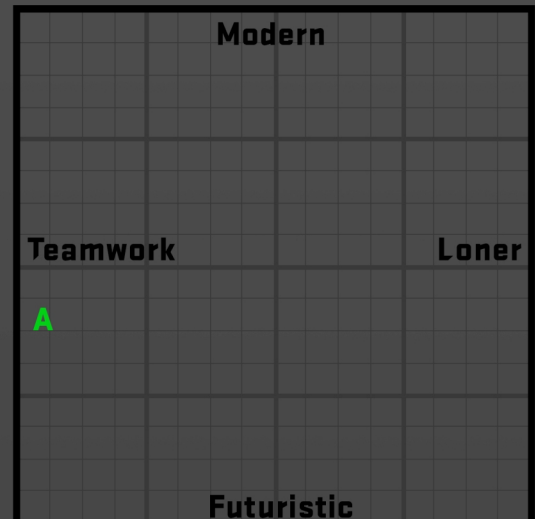**Physiological** — Breathing, food, water, sex, sleep, homeostasis, excretion

♪ INDUSTRIAL ♪

Body Type: Medium

Speed: 400

100 HP

Sky Shield

Bionic pulse/ ASAS

Medic

Durability · Lethality · Combat · G · Objectives · Range

Cybernetic Healer

The Major

Disconnected

Robot Pet

PERSONALITY

Reserved

Lawful · G · Chaotic

Showy

ABILITY

Modern

Teamwork · G · Loner

G · Futuristic

PHOENIX
SPAIN

DIRTYBOMB

NEEDS

Self actualization — Morality, creativity, spontaneity, problem solving, lack of prejudice, acceptance of facts

Esteem — Self-esteem, confidence, achievement, respect of others, respect by others

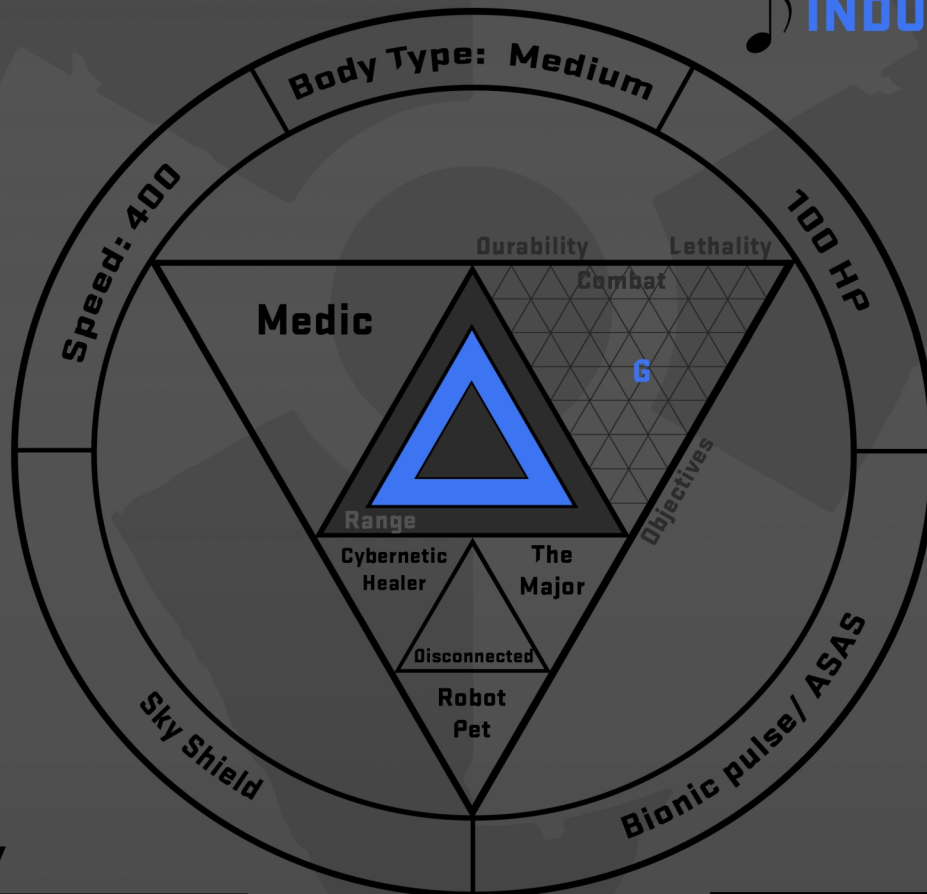Love/Belonging — Friendship, family, sexual intimacy

Safety — Security of: body, employment, resources, morality, the family, health, property

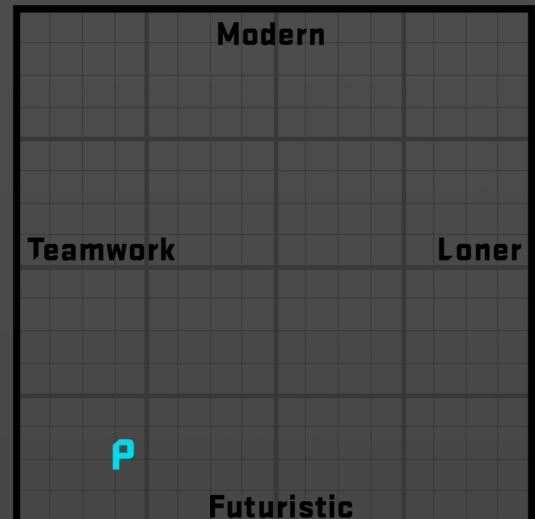Physiological — Breathing, food, water, sex, sleep, homeostasis, excretion

♪ JAZZ FUSION ♪

Body Type: Medium

Speed: 400

100 HP

Durability   Lethality

Combat

Medic

P

Range

Objectives

Smart Doctor   Comedian

Immortal High-Tech Healer

Healing Pulse

Defibrillator / Self Revive

PERSONALITY

Reserved

Lawful   Chaotic

P

Showy

ABILITY

Modern

Teamwork   Loner

P

Futuristic

SAWBONEZ
USA

DIRTYBOMB®

NEEDS

- **Self actualization** — Morality, creativity, spontaneity, problem solving, lack of prejudice, acceptance of facts
- **Esteem** — Self-esteem, confidence, achievement, respect of others, respect by others
- **Love/Belonging** — Friendship, family, sexual intimacy
- **Safety** — Security of: body, employment, resources, morality, the family, health, property
- **Physiological** — Breathing, food, water, sex, sleep, homeostasis, excretion

♪ **FUNK** ♪

Body Type: Medium

Speed: 410

110 HP

Large Health Pack

Defibrillator

Durability — Lethality
Combat
Range
Objectives

Medic

S

Field Surgeon

Danny Glover

Chronic

Combat Medic

PERSONALITY

Reserved

Lawful — Chaotic

S

Showy

ABILITY

Modern

Teamwork — Loner

S

Futuristic

SPARKS
RUSSIA

DIRTYBOMB®

NEEDS

Self actualization — Morality, creativity, spontaneity, problem solving, lack of prejudice, acceptance of facts

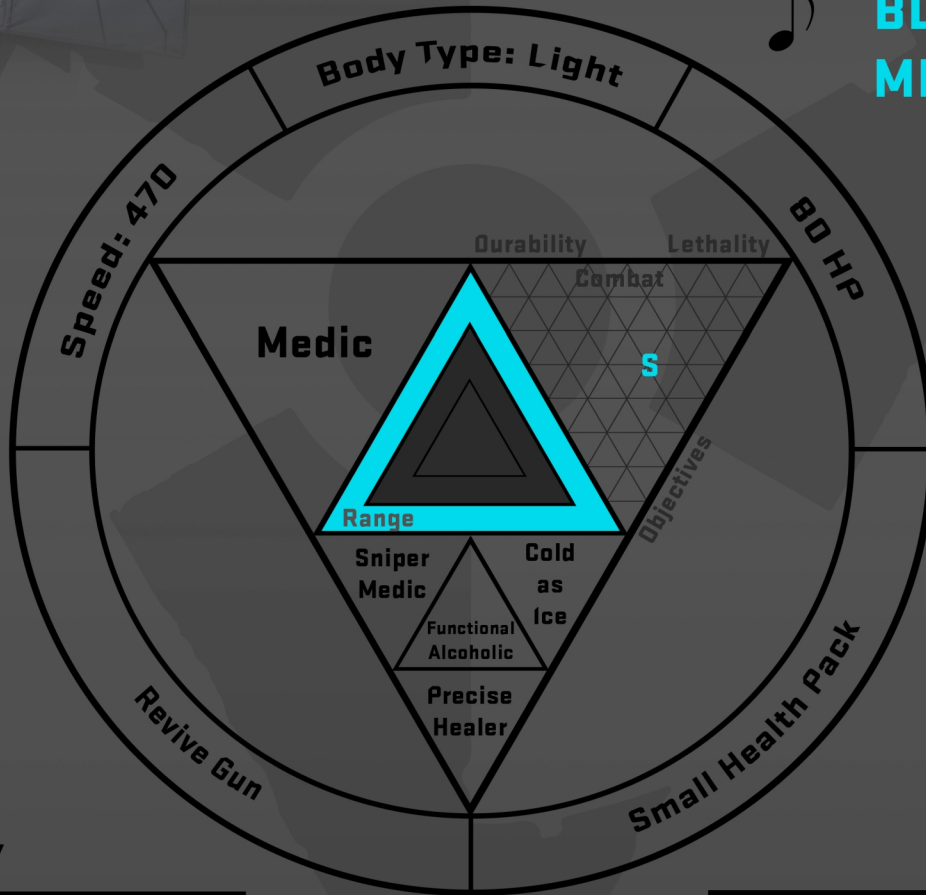Esteem — Self-esteem, confidence, achievement, respect of others, respect by others

Love/Belonging — Friendship, family, sexual intimacy

Safety — Security of: body, employment, resources, morality, the family, health, property

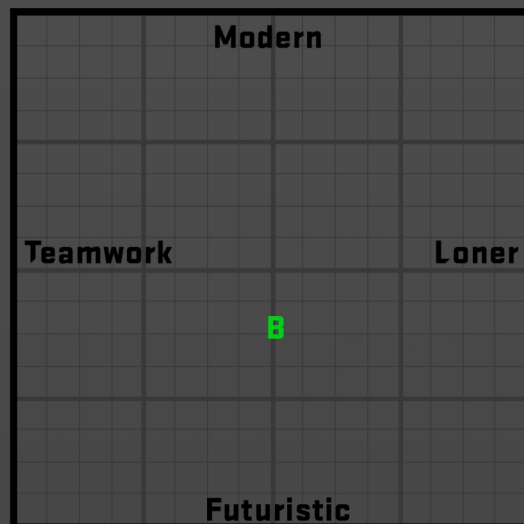Physiological — Breathing, food, water, sex, sleep, homeostasis, excretion

♪ BLACK METAL ♪

Body Type: Light

Speed: 470

80 HP

Durability   Lethality

Combat

Medic

S

Objectives

Range

Sniper Medic

Cold as Ice

Functional Alcoholic

Precise Healer

Revive Gun

Small Health Pack

PERSONALITY

Reserved

Lawful   Chaotic

S

Showy

ABILITY

Modern

Teamwork   Loner

S

Futuristic

BUSHWHACKER
USA

DIRTYBOMB®

NEEDS

Self actualization	Morality, creativity, spontaneity, problem solving, lack of prejudice, acceptance of facts
Esteem	Self-esteem, confidence, achievement, respect of others, respect by others
Love/Belonging	Friendship, family, sexual intimacy
Safety	Security of: body, employment, resources, morality, the family, health, property
Physiological	Breathing, food, water, sex, sleep, homeostasis, excretion

♪ **SOUTHERN ROCK** ♫

Body Type: Medium

Speed: 400

110 HP

Durability   Lethality

Combat

Engineer

B

Objectives

Range

Gruff Mechanic   Hillbilly

Misses Teaching Robo-Pet Owner

Turret

Objective Specialist

PERSONALITY

Reserved

B

Lawful   Chaotic

Showy

ABILITY

Modern

Teamwork   Loner

B

Futuristic

FLETCHER
NIGERIA

DIRTYBOMB

NEEDS

Self actualization — Morality, creativity, spontaneity, problem solving, lack of prejudice, acceptance of facts

Esteem — Self-esteem, confidence, achievement, respect of others, respect by others
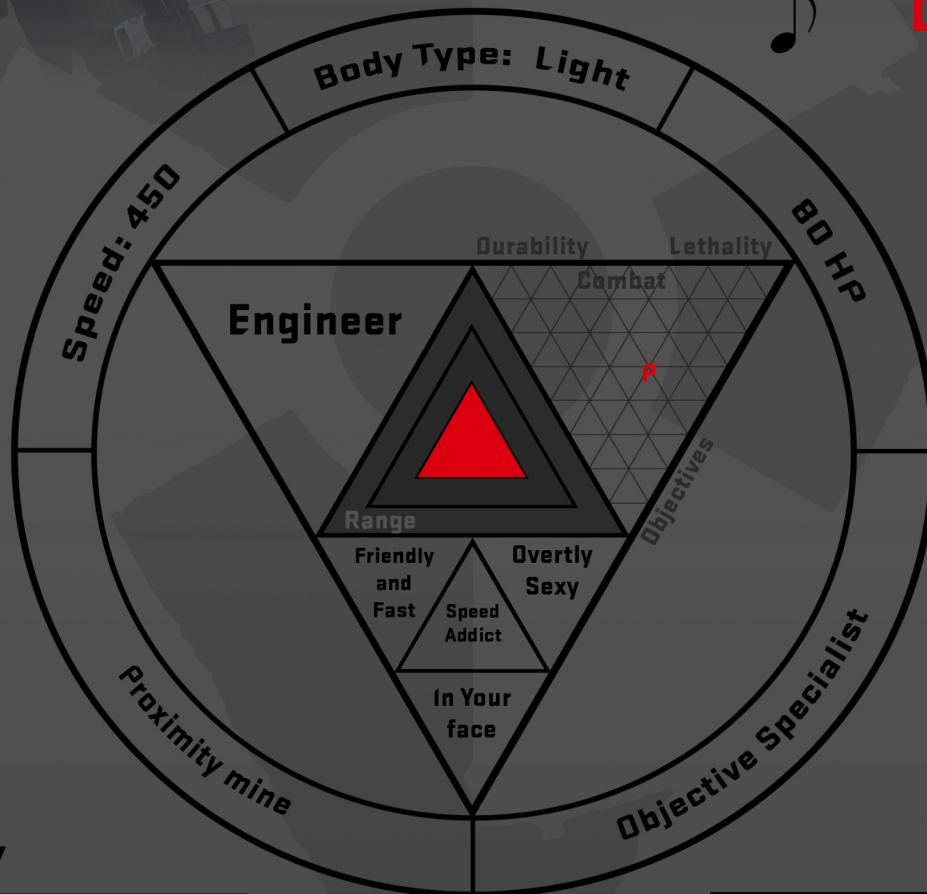
Love/Belonging — Friendship, family, sexual intimacy

Safety — Security of: body, employment, resources, morality, the family, health, property

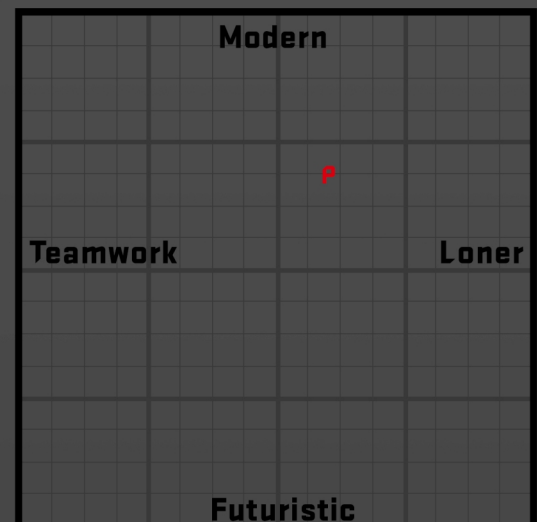Physiological — Breathing, food, water, sex, sleep, homeostasis, excretion

♪ GRIME ♪

Body Type: Medium

Speed: 400

110 HP

Durability — Lethality
Combat

Engineer

F

Range

Stylish Killer

African Stereotype

Family Man

Classy

Objectives

Sticky Bomb

Objective Specialist

PERSONALITY

Reserved

Lawful — Chaotic

F

Showy

ABILITY

Modern

Teamwork — F — Loner

Futuristic

PROXY
ENGLAND

DIRTYBOMB®

NEEDS

Self actualization — Morality, creativity, spontaneity, problem solving, lack of prejudice, acceptance of facts

Esteem — Self-esteem, confidence, achievement, respect of others, respect by others

Love/Belonging — Friendship, family, sexual intimacy

Safety — Security of: body, employment, resources, morality, the family, health, property

Physiological — Breathing, food, water, sex, sleep, homeostasis, excretion

♪ OnB ♫

Body Type: Light

Speed: 450

80 HP

Durability   Lethality
Combat

Engineer

Range

Objectives

Friendly and Fast

Overtly Sexy

Speed Addict

In Your face

Proximity mine

Objective Specialist

PERSONALITY

Reserved

Lawful   Chaotic

Showy

ABILITY

Modern

Teamwork   Loner

Futuristic

TURTLE
TURKEY

DIRTYBOMB

NEEDS

- **Self actualization** — Morality, creativity, spontaneity, problem solving, lack of prejudice, acceptance of facts
- **Esteem** — Self-esteem, confidence, achievement, respect of others, respect by others
- **Love/Belonging** — Friendship, family, sexual intimacy
- **Safety** — Security of: body, employment, resources, morality, the family, health, property
- **Physiological** — Breathing, food, water, sex, sleep, homeostasis, excretion

♪ **PSY TRANCE** ♪

Body Type: Medium

Speed: 400

110 HP

Shield Generator

Objective Speciality

Durability Lethality
Combat
Engineer
T
Range
Objectives
Thoughtful Engi   **Muslim Stereotype**
Phantom Limb
Protective Handyman

PERSONALITY

Reserved

Lawful   T   Chaotic

Showy

ABILITY

Modern

Teamwork   Loner

T
Futuristic

NEEDS

Self actualization — Morality, creativity, spontaneity, problem solving, lack of prejudice, acceptance of facts

Esteem — Self-esteem, confidence, achievement, respect of others, respect by others

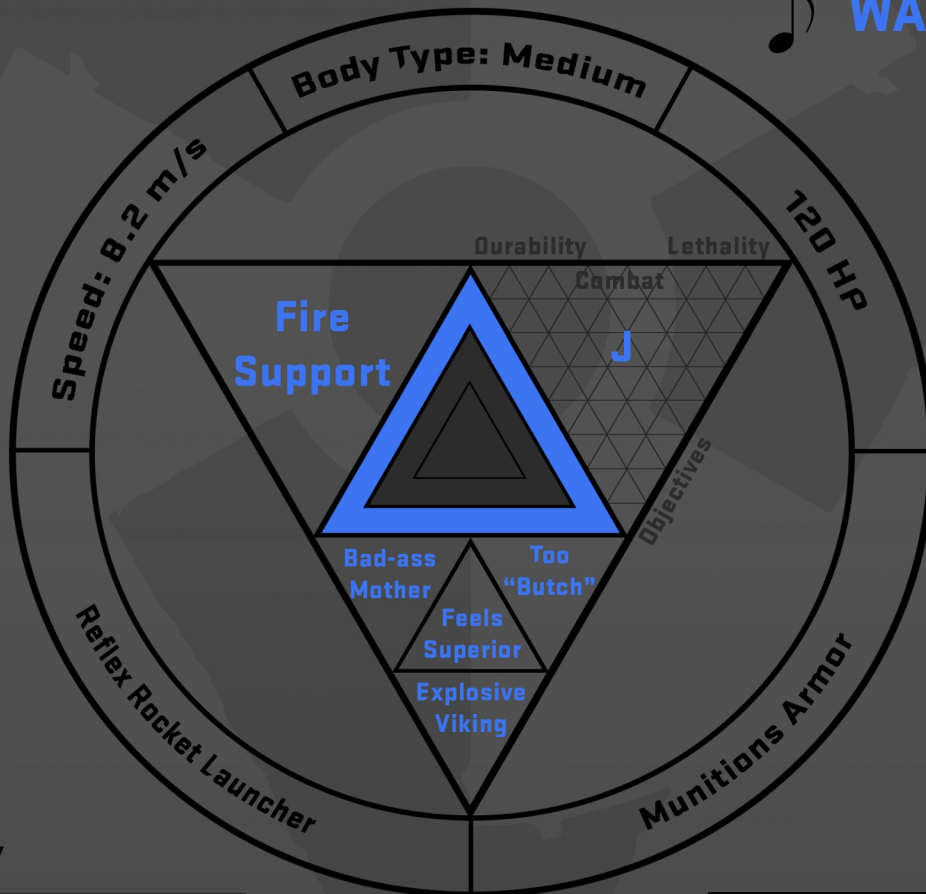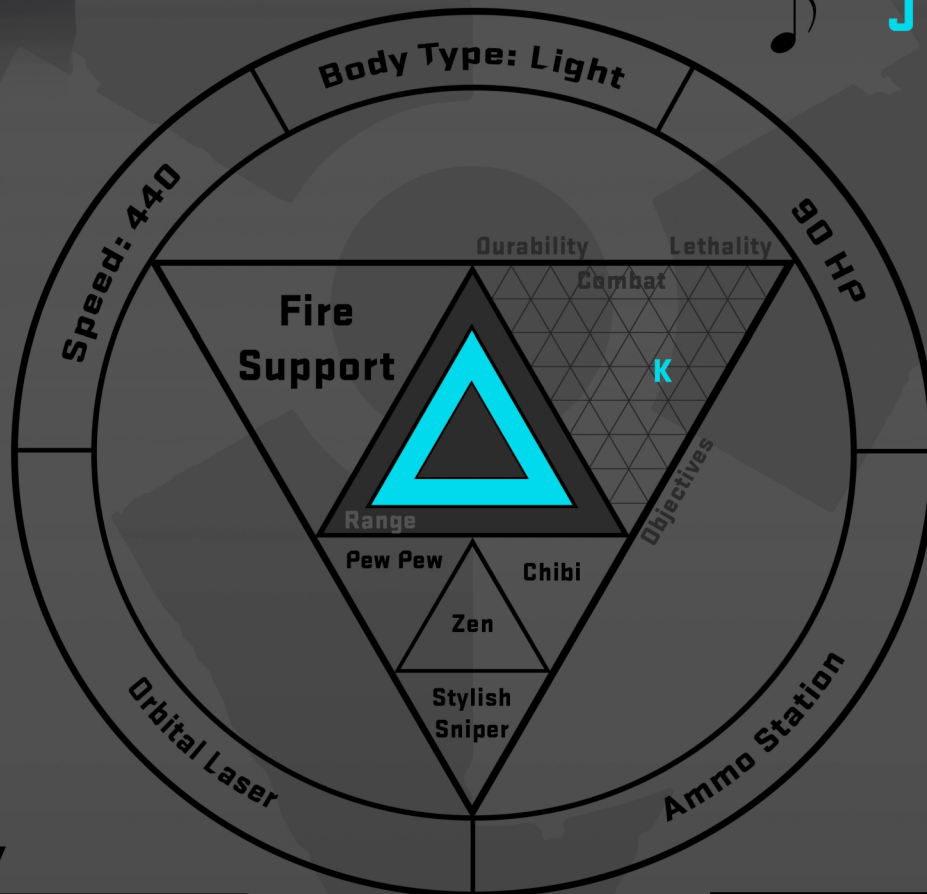Love/Belonging — Friendship, family, sexual intimacy

Safety — Security of: body, employment, resources, morality, the family, health, property

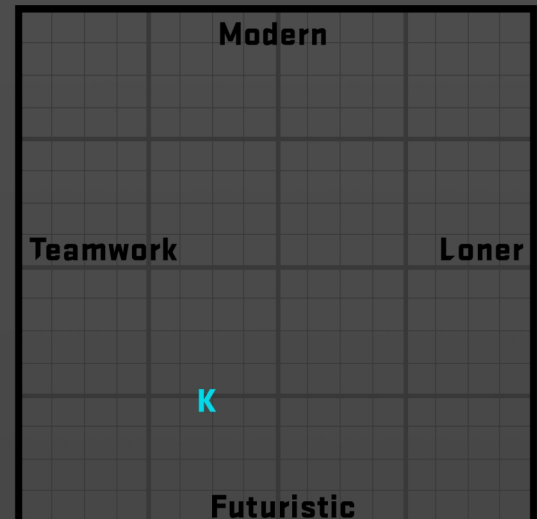Physiological — Breathing, food, water, sex, sleep, homeostasis, excretion

♪ HARCOORE HIP HOP ♪

Body Type: Medium

Speed: 400

120 HP

Durability   Lethality

Combat

A

Fire Support

Range

Objectives

Abrasive and Deadly   Chow Yun-Fat

Already Rich

Pinpoint Destruction

Artillery Spotter

Ammo Pack

PERSONALITY

Reserved

Lawful   Chaotic

A

Showy

ABILITY

Modern

A

Teamwork   Loner

Futuristic

JAVELIN
NORWAY

DIRTYBOMB®

NEEDS

- **Self actualization** — Morality, creativity, spontaneity, problem solving, lack of prejudice, acceptance of facts
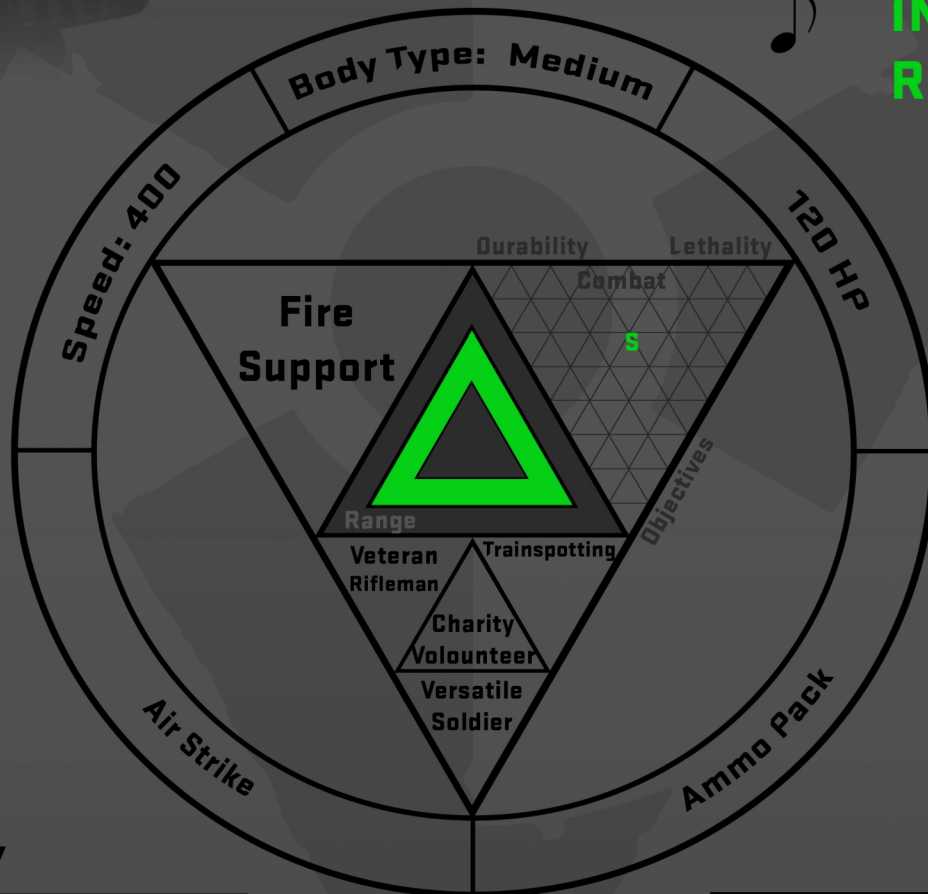- **Esteem** — Self-esteem, confidence, achievement, respect of others, respect by others
- **Love/Belonging** — Friendship, family, sexual intimacy
- **Safety** — Security of: body, employment, resources, morality, the family, health, property
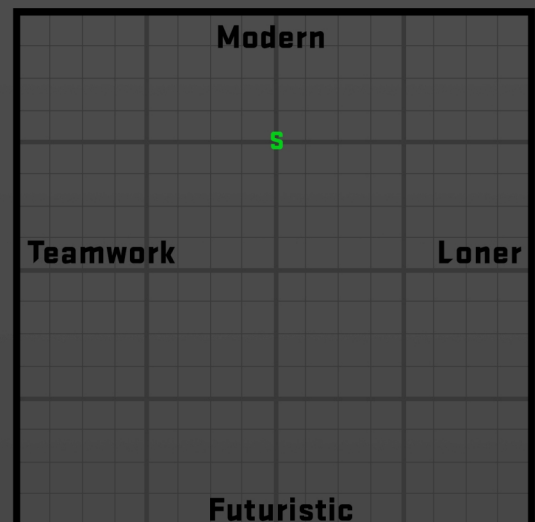- **Physiological** — Breathing, food, water, sex, sleep, homeostasis, excretion

♪ WAGNER ♫

Body Type: Medium

Speed: 8.2 m/s

120 HP

Durability — Lethality

Combat

Fire Support

J

Objectives

Bad-ass Mother

Too "Butch"

Feels Superior

Explosive Viking

Reflex Rocket Launcher

Munitions Armor

PERSONALITY

Reserved

J

Lawful — Chaotic

Showy

ABILITY

Modern

Teamwork — Loner

J

Futuristic

KIRA
JAPAN

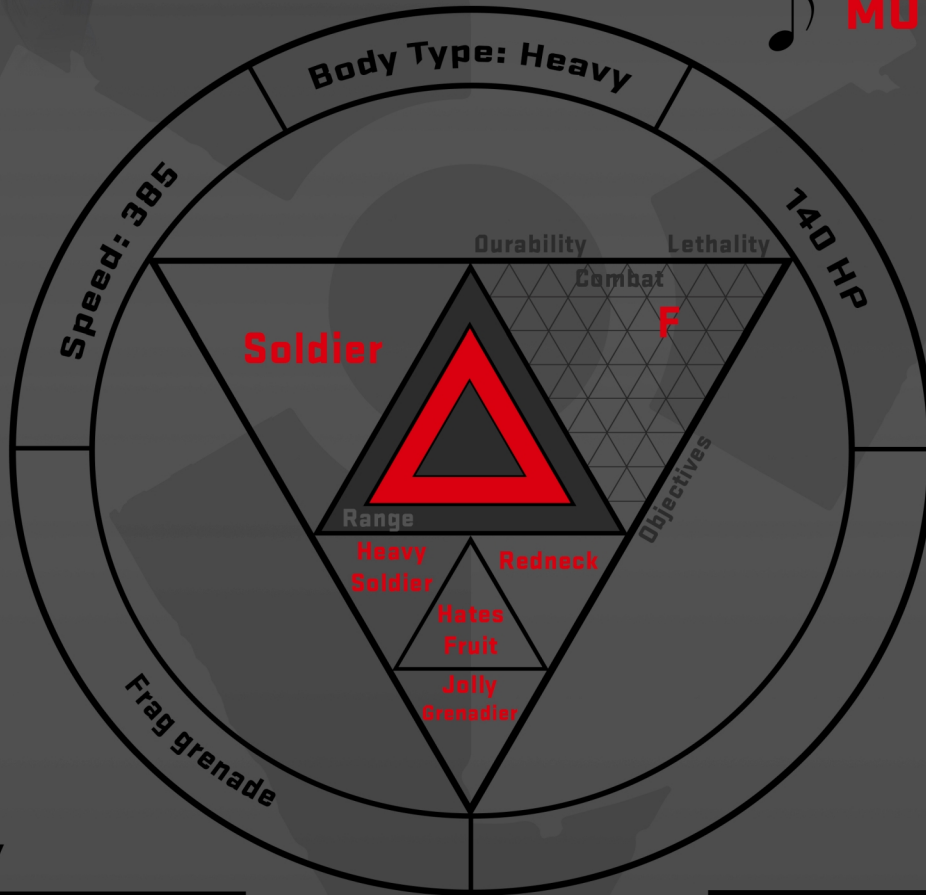DIRTYBOMB®

NEEDS

Self actualization — Morality, creativity, spontaneity, problem solving, lack of prejudice, acceptance of facts

Esteem — Self-esteem, confidence, achievement, respect of others, respect by others

Love/Belonging — Friendship, family, sexual intimacy

Safety — Security of: body, employment, resources, morality, the family, health, property

Physiological — Breathing, food, water, sex, sleep, homeostasis, excretion

♪ J POP ♪

Body Type: Light

Speed: 440

90 HP

Fire Support

Durability — Combat — Lethality

Range

K

Objectives

Pew Pew

Chibi

Zen

Stylish Sniper

Orbital Laser

Ammo Station

PERSONALITY

Reserved

Lawful

K

Chaotic

Showy

ABILITY

Modern

Teamwork

Loner

K

Futuristic

SKYHAMMER
SCOTLAND

DIRTYBOMB

NEEDS

Self actualization — Morality, creativity, spontaneity, problem solving, lack of prejudice, acceptance of facts

Esteem — Self-esteem, confidence, achievement, respect of others, respect by others

Love/Belonging — Friendship, family, sexual intimacy

Safety — Security of: body, employment, resources, morality, the family, health, property

Physiological — Breathing, food, water, sex, sleep, homeostasis, excretion

♪ INDIE ROCK ♫

Body Type: Medium

Speed: 400

120 HP

Air Strike

Ammo Pack

Durability   Lethality

Combat

S

Objectives

Fire Support

Range

Veteran Rifleman

Trainspotting

Charity Volounteer

Versatile Soldier

PERSONALITY

Reserved

Lawful

Chaotic

S

Showy

ABILITY

Modern

S

Teamwork

Loner

Futuristic

NEEDS
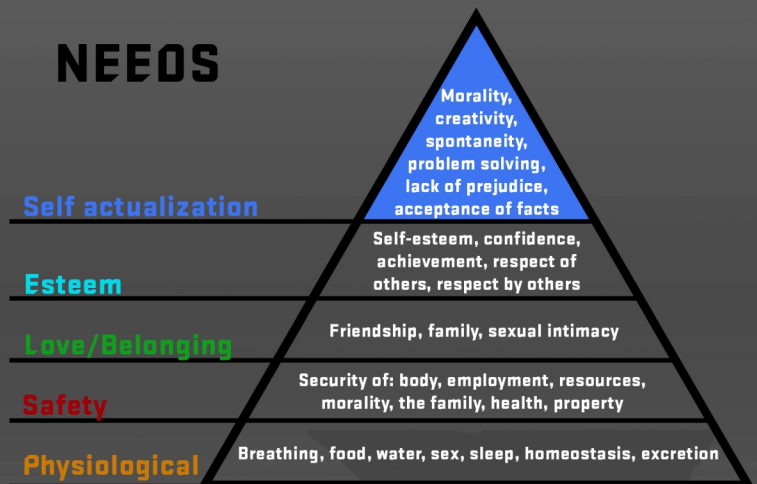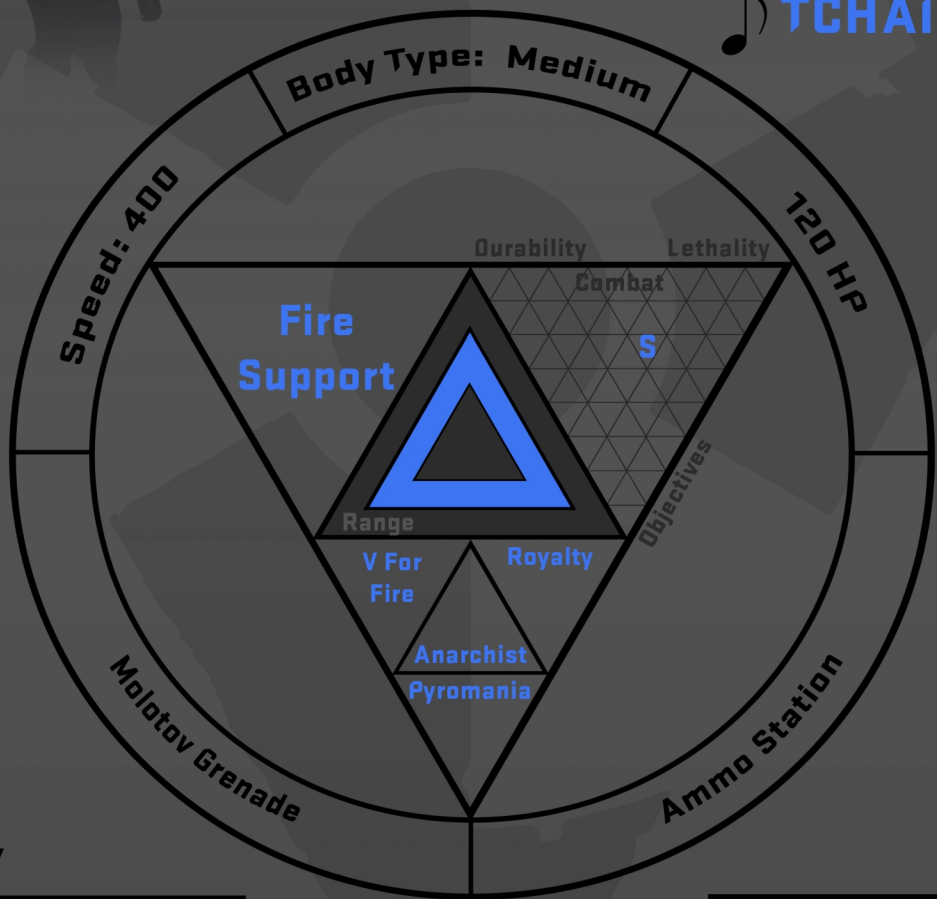
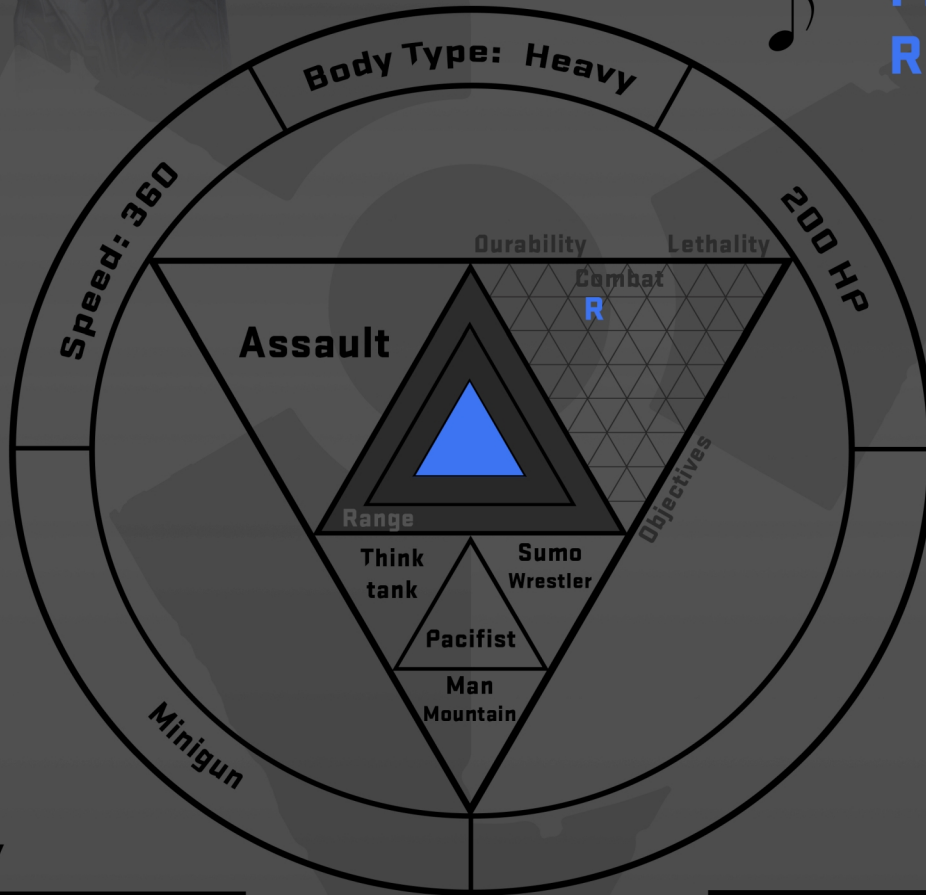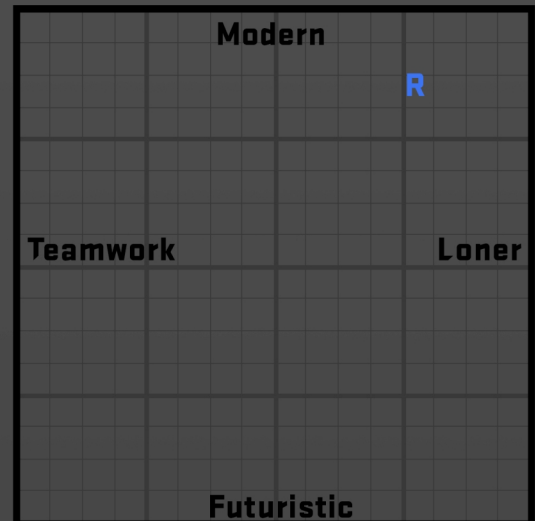|	
	Morality, creativity, spontaneity, problem solving, lack of prejudice, acceptance of facts
Self actualization	
Esteem	Self-esteem, confidence, achievement, respect of others, respect by others
Love/Belonging	Friendship, family, sexual intimacy
Safety	Security of: body, employment, resources, morality, the family, health, property
Physiological	Breathing, food, water, sex, sleep, homeostasis, excretion

♪ MOTOWN ♫

Body Type: Heavy

Speed: 385

140 HP

Frag grenade

Durability · Lethality

Combat

F

Objectives

Range

Soldier

Heavy Soldier

Redneck

Hates Fruit

Jolly Grenadier

PERSONALITY

Reserved

Lawful — Chaotic

F

Showy

ABILITY

Modern

F

Teamwork — Loner

Futuristic

NADER
GERMANY

DIRTYBOMB®

NEEDS

- **Self actualization** — Morality, creativity, spontaneity, problem solving, lack of prejudice, acceptance of facts
- **Esteem** — Self-esteem, confidence, achievement, respect of others, respect by others
- **Love/Belonging** — Friendship, family, sexual intimacy
- **Safety** — Security of: body, employment, resources, morality, the family, health, property
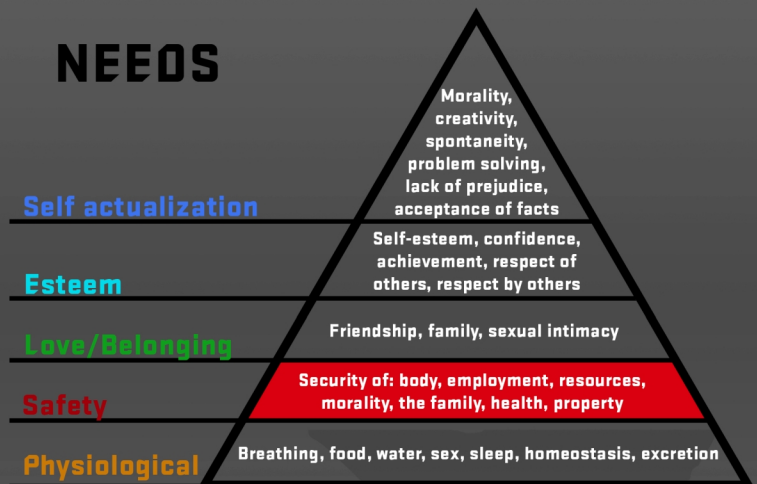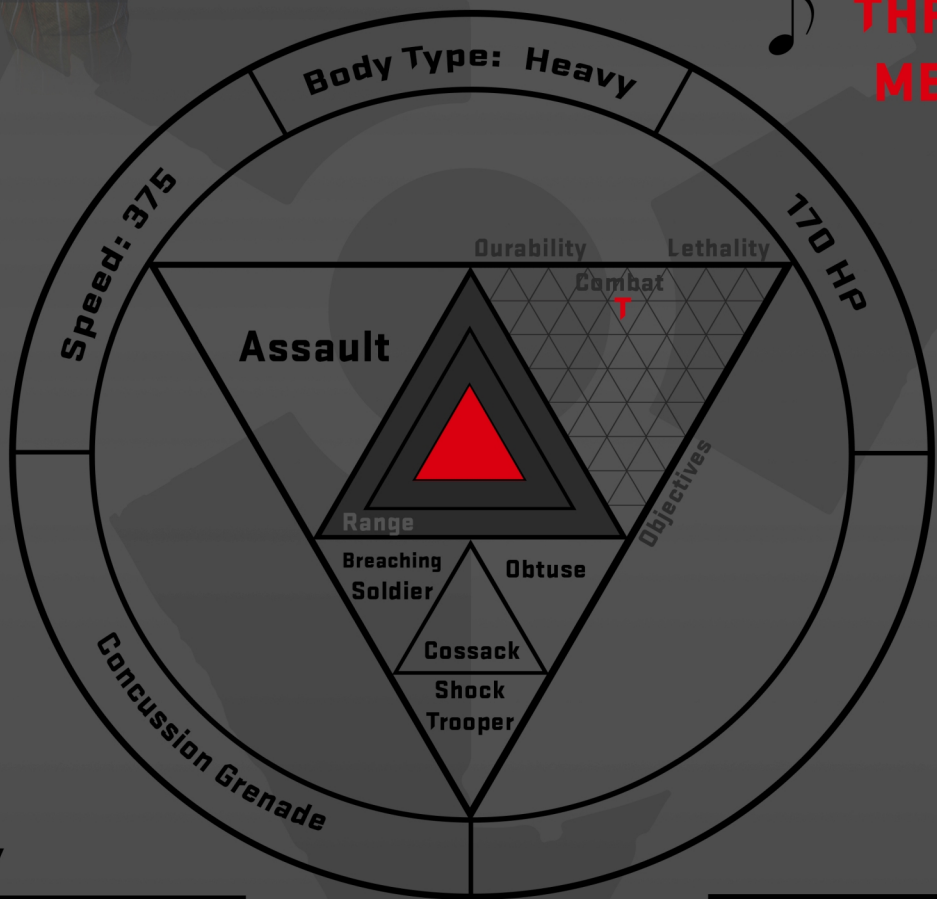- **Physiological** — Breathing, food, water, sex, sleep, homeostasis, excretion

♪ **NEW WAVE** ♪

Body Type: Medium
Speed: 400
120 HP

Durability   Lethality
Combat

Soldier   N

Range
Warrior Woman   LGBTQ+ Stereotype

Objectives

Pansexual
Aggressive
Explosive

Grenade Launcher

Martyrdom
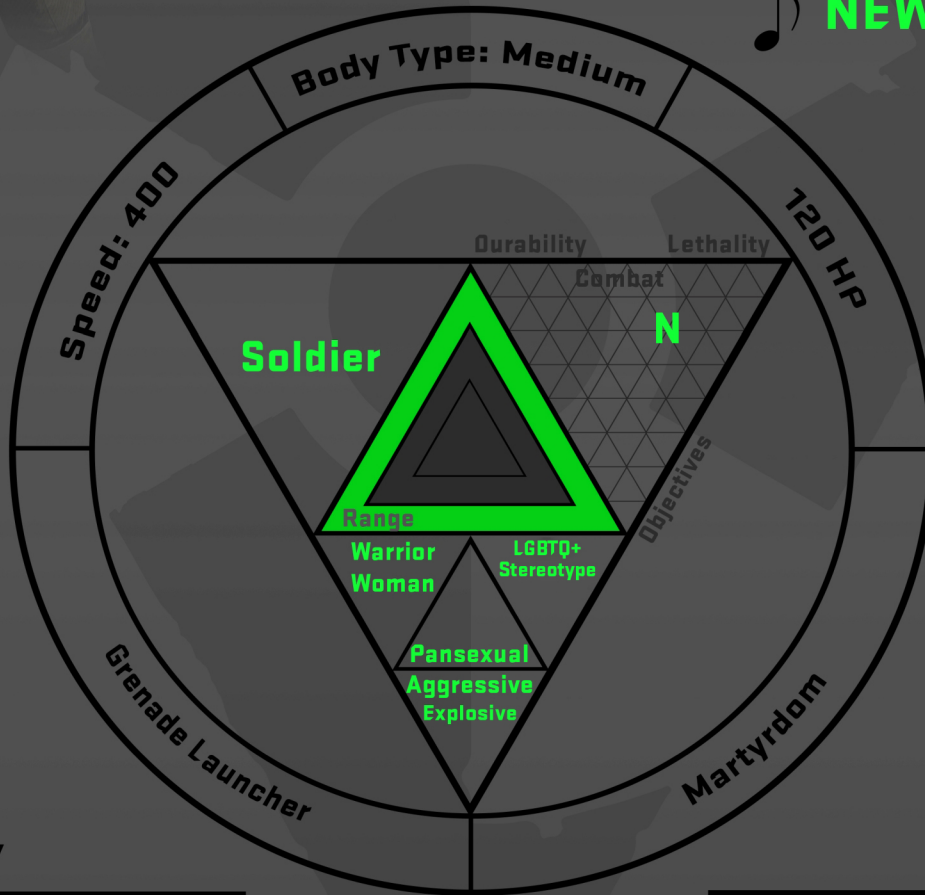
PERSONALITY

Reserved

N

Lawful   Chaotic

Showy

ABILITY

Modern

N

Teamwork   Loner

Futuristic

NEEDS

Self actualization — Morality, creativity, spontaneity, problem solving, lack of prejudice, acceptance of facts

Esteem — Self-esteem, confidence, achievement, respect of others, respect by others
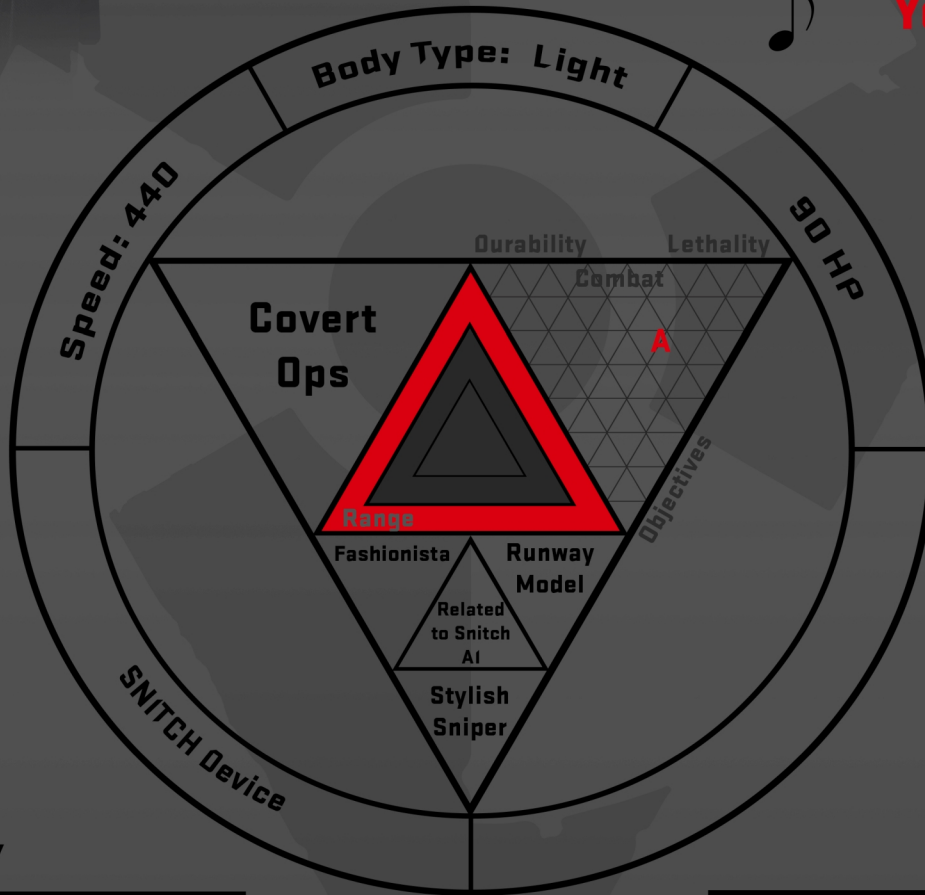
Love/Belonging — Friendship, family, sexual intimacy

Safety — Security of: body, employment, resources, morality, the family, health, property

Physiological — Breathing, food, water, sex, sleep, homeostasis, excretion

♪ PROG ROCK ♫

Body Type: Heavy

Speed: 360

200 HP

Durability   Lethality

Combat   R

Assault

Range

Objectives

Think tank

Sumo Wrestler

Pacifist

Man Mountain

Minigun

PERSONALITY

Reserved

R

Lawful

Chaotic

Showy

ABILITY

Modern

R

Teamwork

Loner

Futuristic

NEEDS

- **Self actualization** — Morality, creativity, spontaneity, problem solving, lack of prejudice, acceptance of facts
- **Esteem** — Self-esteem, confidence, achievement, respect of others, respect by others
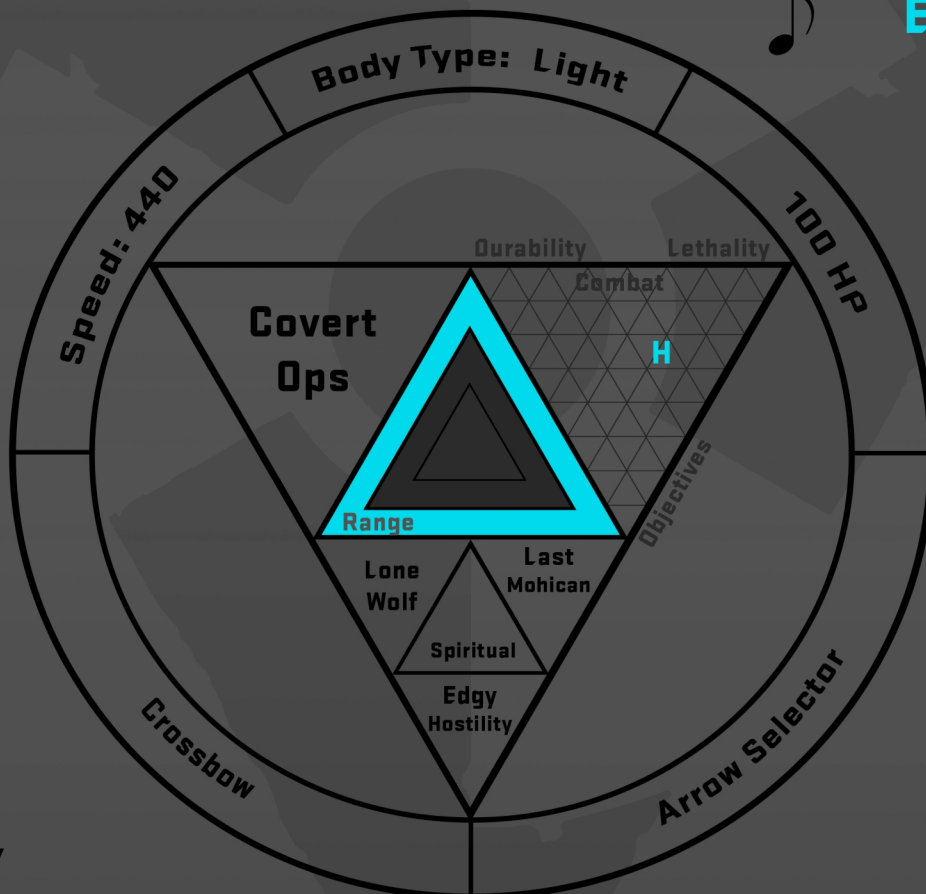- **Love/Belonging** — Friendship, family, sexual intimacy
- **Safety** — Security of: body, employment, resources, morality, the family, health, property
- **Physiological** — Breathing, food, water, sex, sleep, homeostasis, excretion

♪ **THRASH METAL** ♪

Body Type: Heavy

Speed: 375

170 HP

Concussion Grenade

Durability — Lethality — Combat — T

Assault

Range

Objectives

Breaching Soldier — Obtuse

Cossack

Shock Trooper

PERSONALITY

- Reserved
- Lawful
- Chaotic
- T
- Showy

ABILITY

- Modern
- T
- Teamwork
- Loner
- Futuristic

AIMEE
FRANCE

DIRTYBOMB

NEEDS

Self actualization — Morality, creativity, spontaneity, problem solving, lack of prejudice, acceptance of facts

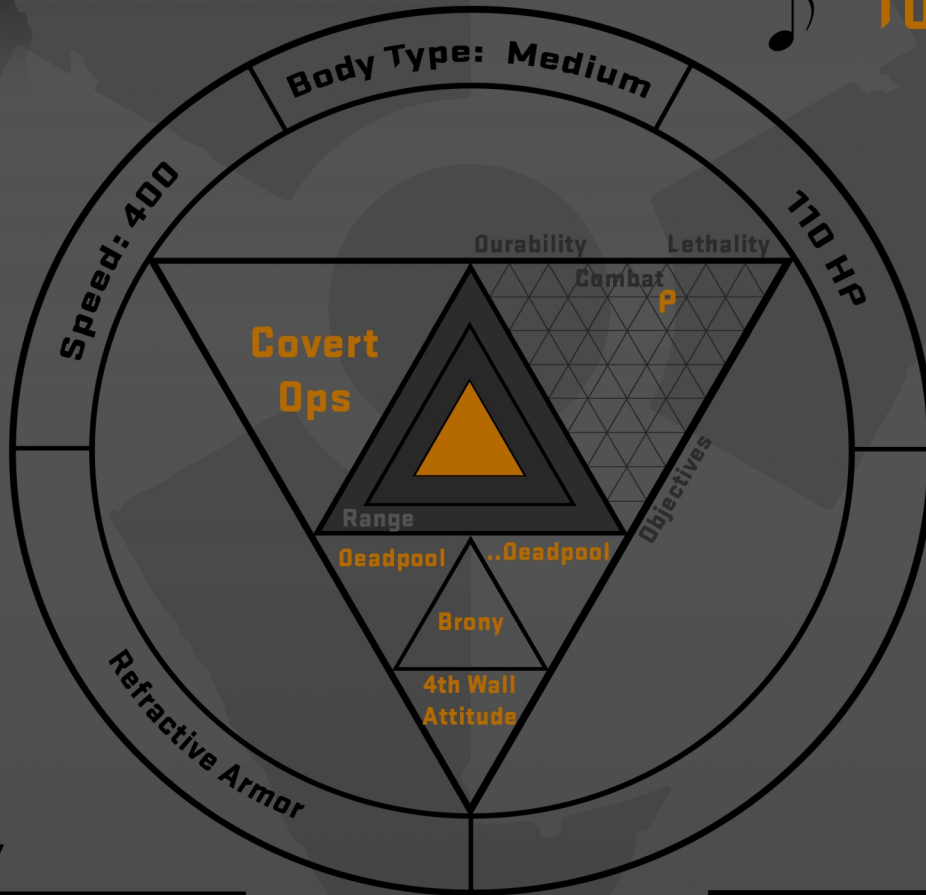Esteem — Self-esteem, confidence, achievement, respect of others, respect by others

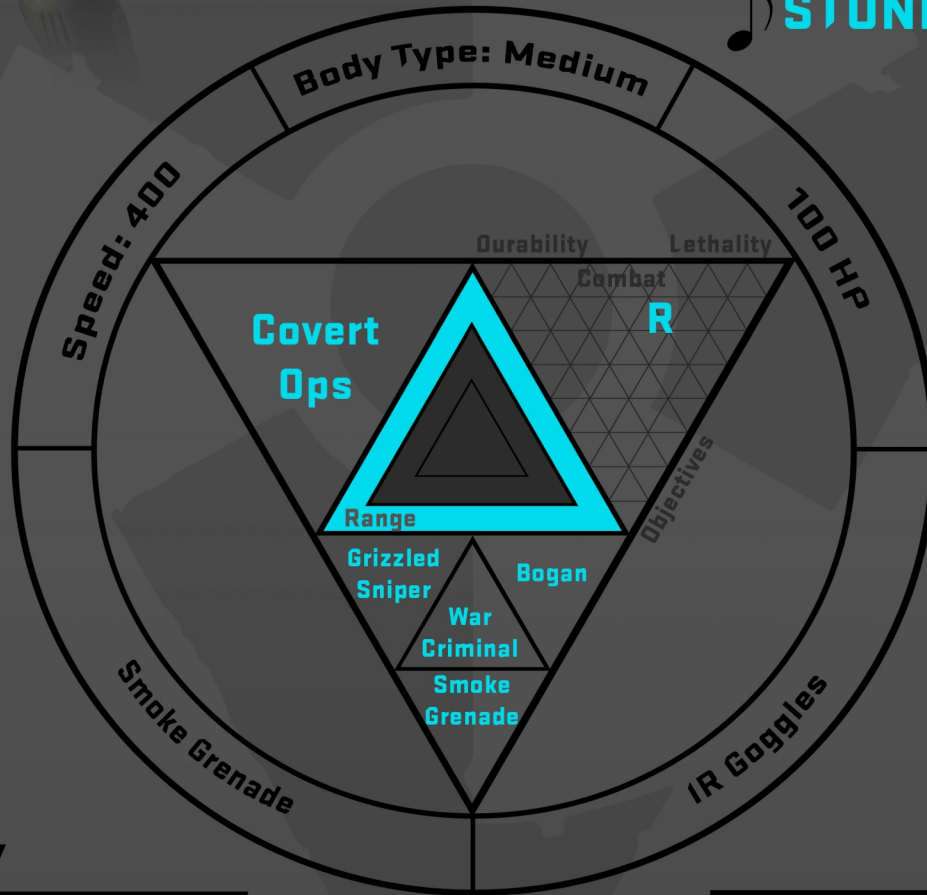Love/Belonging — Friendship, family, sexual intimacy

Safety — Security of: body, employment, resources, morality, the family, health, property

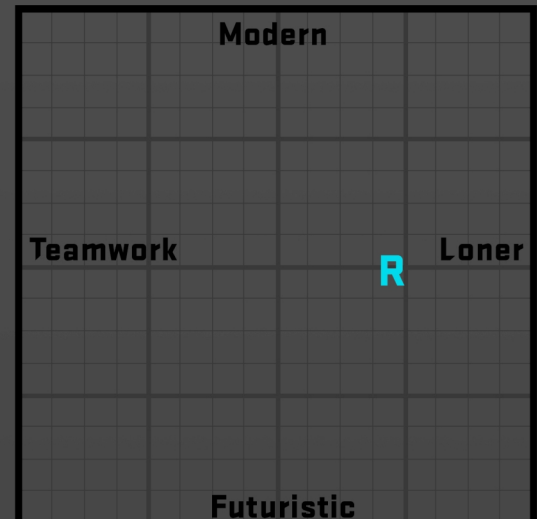Physiological — Breathing, food, water, sex, sleep, homeostasis, excretion

♪ Yé-Yé ♫

Body Type: Light
Speed: 440
90 HP

Durability   Lethality
Combat
Covert Ops
A
Objectives
Range
Fashionista   Runway Model
Related to Snitch AI
Stylish Sniper

SNITCH Device

PERSONALITY

Reserved

A

Lawful   Chaotic

Showy

ABILITY

Modern

Teamwork   Loner
A

Futuristic

HUNTER
USA

DIRTYBOMB®

NEEDS

Self actualization — Morality, creativity, spontaneity, problem solving, lack of prejudice, acceptance of facts

Esteem — Self-esteem, confidence, achievement, respect of others, respect by others

Love/Belonging — Friendship, family, sexual intimacy

Safety — Security of: body, employment, resources, morality, the family, health, property

Physiological — Breathing, food, water, sex, sleep, homeostasis, excretion

♪ EMO ♫

Body Type: Light

Speed: 440

100 HP

Durability   Lethality
Combat

Covert Ops

H

Range

Objectives

Lone Wolf

Last Mohican

Spiritual

Edgy Hostility

Crossbow

Arrow Selector

PERSONALITY

Reserved

Lawful   H   Chaotic

Showy

ABILITY

Modern

Teamwork   Loner
                          H

Futuristic

NEEDS

Self actualization — Morality, creativity, spontaneity, problem solving, lack of prejudice, acceptance of facts

Esteem — Self-esteem, confidence, achievement, respect of others, respect by others

Love/Belonging — Friendship, family, sexual intimacy

Safety — Security of: body, employment, resources, morality, the family, health, property

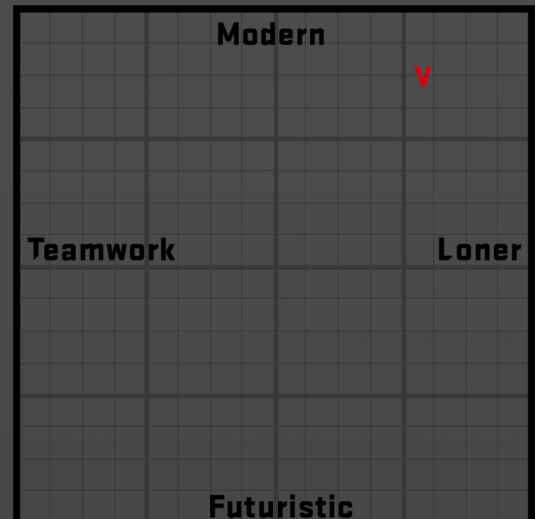Physiological — Breathing, food, water, sex, sleep, homeostasis, excretion

♪ TOP 40 ♫

Body Type: Medium

Speed: 400

110 HP

Refractive Armor

Durability   Lethality

Combat
P

Covert Ops

Range

Objectives

Deadpool   ..Deadpool

Brony

4th Wall Attitude

PERSONALITY

Reserved

Lawful   Chaotic

P

Showy

ABILITY

Modern

Teamwork   Loner

Futuristic   P

REDEYE
AUSTRALIA

DIRTYBOMB

NEEOS

- Self actualization — Morality, creativity, spontaneity, problem solving, lack of prejudice, acceptance of facts
- Esteem — Self-esteem, confidence, achievement, respect of others, respect by others
- Love/Belonging — Friendship, family, sexual intimacy
- Safety — Security of: body, employment, resources, morality, the family, health, property
- Physiological — Breathing, food, water, sex, sleep, homeostasis, excretion

♪ STONER ROCK ♪

Body Type: Medium

Speed: 400

100 HP

Ourability

Lethality

Combat

R

Covert Ops

Objectives

Range

Grizzled Sniper

Bogan

War Criminal

Smoke Grenade

Smoke Grenade

IR Goggles

PERSONALITY

Reserved

Lawful

R

Chaotic

Showy

ABILITY

Modern

Teamwork

R

Loner

Futuristic

VASSILI
ENGLAND

DIRTYBOMB®

NEEDS

Self actualization — Morality, creativity, spontaneity, problem solving, lack of prejudice, acceptance of facts

Esteem — Self-esteem, confidence, achievement, respect of others, respect by others

Love/Belonging — Friendship, family, sexual intimacy

Safety — Security of: body, employment, resources, morality, the family, health, property

Physiological — Breathing, food, water, sex, sleep, homeostasis, excretion

♪ BRIT PUNK ♪

Body Type: Medium

Speed: 420

110 HP

Heartbeat Sensor

Covert Ops

Durability   Lethality
Combat
V
Range
Objectives

Distant and Moody   Emo

Sensitive

Loner Sniper

PERSONALITY

Reserved

Lawful   Chaotic

V

Showy

ABILITY

Modern

V

Teamwork   Loner

Futuristic
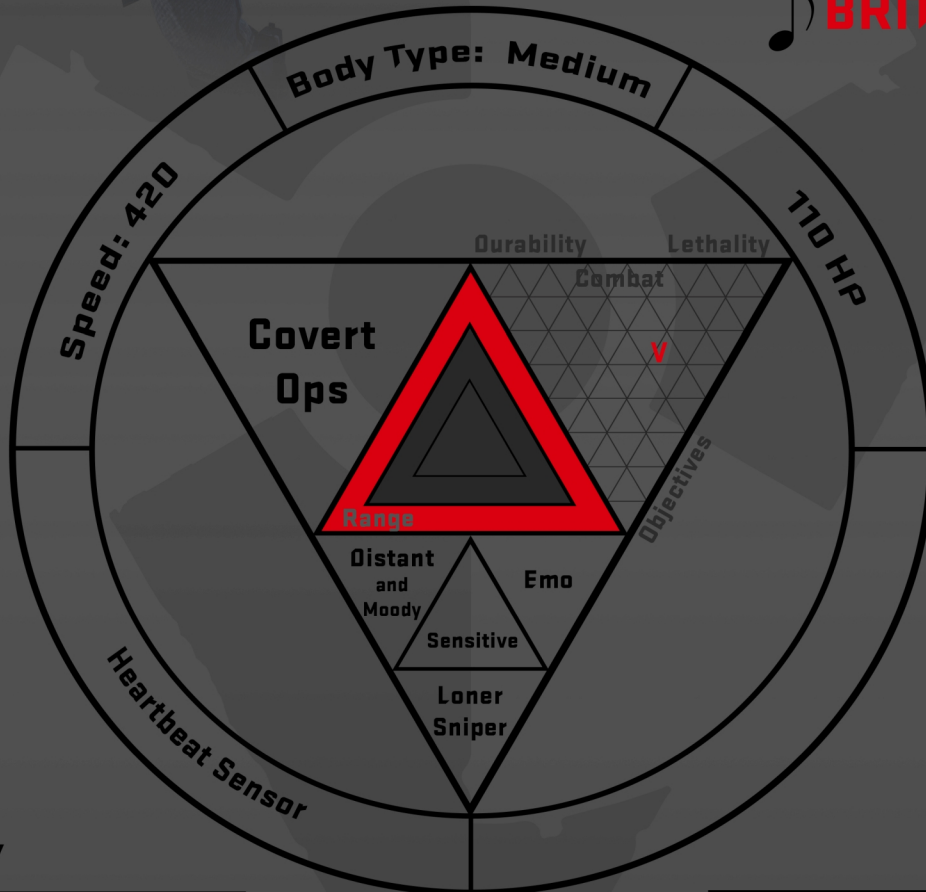
WEAPONS

WEAPON LIST

ASSAULT RIFLES

M4A1

A standard military assault rifle. Effective in many situations, ideally suited for medium to long range.

BR-16

A burst-fire assault rifle, most effective at medium-to-long range. Its high burst damage and ease to control are its strongest factors.

Dreiss AR

A semi-automatic assault rifle, highly accurate when handled correctly and built for long-range combat. Firing too quickly can make this rifle hard to control, giving it a high skill-ceiling.

Timik-47

A powerful assault rifle with a lot of kick. Harder to control than the M4A1, although can be highly effective in the right hands.

Hurtsall 2K

Bullpup assault rifle: Lower damage and faster firing than most ARs.

Concept

SHAR-C

A slow firing assault rifle, that has more accurate first bullets compared to a M4/Timik and higher damage. It also has more vertical recoil and a longer range compared to a M4/Timik.

Concept

Stark AR

A burst-fire assault rifle, useful to picking off opponents at range. It's tight spread and high damage-potential are it's strong point, and it definitely has quite the kick while handling.

LMGS

MK46

A very fast-firing, high-capacity machine gun. It is most effective at shorter range, due to it's larger spread, but can be used to fill the air with lead at longer ranges.

K-121

A very high damage, slow firing machine gun. Effective at most range with a large capacity magazine. Controlling it's massive recoil is the main task.

MACHINE PISTOLS

MP400

A high rate of fire and damage output, but low-capacity machine pistol. Great for finishing off wounded opponents.

Tølen MP

A high-rate of fire machine pistol that's effective at close range.

Empire-9

A machine pistol with a kick. It has a lower damage-per-shot, although it's very fast fire-rate and large magazine make up for this.

Ryburn MP

Slower firing, higher damage, longer-range and high vertical recoil compared to other machine pistols. Better initial accuracy but worse accuracy over time.

Concept

PISTOLS

M9

Standard military pistol that's useful at close range, with a high capacity, but low damage-per-shot. It has good accuracy overall and a very fast fire-rate, although it's hindered by low damage per shot, compared to some other pistols.

DE .50

Your typical high-powered, long-range pistol. Does a lot of damage and kicks with each shot but has a limited magazine capacity.

Simeon .357

A high damage and high accuracy revolver, but slow firing. It's only got 6 rounds, with a lengthy reload, so every shot has to count. However, it can be a highly effective side-arm for picking off wounded enemies from a distance.

Caulden

A high damage pistol but has limited magazine capacity. It's the good middle-ground between the light pistols and a hand cannon.

Selbstadt .40

Moderate damage output and good accuracy overall. Comes equipped with a high capacity magazine compared to other pistols, so is fairly forgiving when used for suppressing fire.

Smjüth & Whetsman .40

The Smjüth & Whetsman .40 is a slow-firing revolver with a high damage-per-shot, although its DPS is considerably lower than other pistols to compensate for it's high front-loaded damage. It excels as a powerful side-arm to finish foes quickly at a decent range, with high precision.

Hoigat .224

A very fast firing semi-automatic pistol with very low recoil. It has a high magazine capacity to deal high amounts of sustained fire for a secondary weapon.

Arevarov 9

Like Selbstadt (medium capacity, medium damage) but shorter range, bit lower damage and a bit more accurate.

SHOTGUNS

Hollunds 880

Your typical pump-action shotgun. Very deadly at close-to-medium range, but quickly loses its punch at distance. It is a good middle-ground of all the available shotguns.

Remburg 7

A powerful, very close-range pump-action shotgun. It has the highest damage output of all the shotguns but is the most inaccurate.

Ahnuhld-12

A lever-action shotgun, firing flechette shells which are longer range that typical shotgun shells. It is significantly more accurate than other shotguns, although slightly lower damage as well.

SNIPER RIFLES

MoA SNPR-1

A deadly bolt-action sniper rifle. Will instantly kill all regular Mercs with a single headshot and is a good well-rounded rifle.

PDP-70

A very long-range weapon. Damage is fairly low for a sniper Rifle however headshots are still extremely potent and the PDP-70 can achieve a very high rate of fire.

FEL-IX

A deadly long-ranged weapon capable of bringing down almost any Merc with a single headshot. It has a slow recovery between each shot, so making sure each shot counts, is a must.

Grandeur SR

A medium-damage semi-automatic sniper rifle. It functions more as a marksman rifle, best used at medium-to-long range, although isn't as effective at very long ranges as other sniper rifles.

SUBMACHINE GUNS

SMG-9

A medium range SMG. Where it lacks a little in raw fire-power, it makes up for in its ease to control, to keep up sustained-fire on the enemy.

Hochfir

A high-capacity, fast-firing SMG, filling the air with lead. Very effective at close range.

KEK-10

A medium range SMG, with a fast fire-rate. It also has a larger mag than most other SMG's, making its damage output fairly good – although, its drawbacks come from its lower accuracy than others.

Crotzni

A slightly slower firing SMG with a little more-than-usual damage. It's got more of a kick though and is a little trickier to control than something like the SMG-9.

Blishlok

The Blishlok is a slow-firing, but hard-hitting SMG. It excels at dealing high up-front damage, compared to other SMG's, but because of its low accuracy it can be a little less reliable.

MELEE WEAPONS

Beckhill Combat Knife

The Beckhill Combat Knife is a short-ranged melee weapon, which is a good medium of them. It is fast swinging with mid-damage potential.

Stilnotto Stiletto

The Stilnotto Stiletto is a very short ranged pocket-knife with minimal slashing power but does slightly more damage than other short-ranged knives with its heavy hit. It can be lethal when used correctly up close and provides full run-speed to Mercs wielding it.

Concept

Kukri

A shorter ranged melee weapon, like the other knives, but does a significant amount of damage. Has a slower swing-speed like a Cricket Bat.

Concept

Cricket Bat

The Cricket Bat is a high damage melee weapon with longer reach than many of the knives. Although it does swing slower, so timing your swings counts for more!

Concept

Katana

Phantom's signature weapon – his Katana he can use to stab his foes in the back when they least expect it. A high front-loaded damage melee weapon with a long reach. It has a slow sing-speed though, so he must make sure every swing hits.

Tactical Combat Axe

Javelin's signature weapon does more damage than knives, has unique attack animations and a slightly faster swing-speed compared to a Kukri.

Concept

Stun Batons

Twin batons which are duel wielded, which can be swung individually with a light attack, or in tandem for a high powered heavy attack. It has a faster swing-speed than other heavier melee weapons.

Ulu

Fastest attack, low damage, high dps. Perfect for quickly finishing people off but lacks one-hit-kill potential.

WEAPON NAMES EXPLAINED

OVERVIEW

So why do DB's guns have the names they do?

Well, we're trying to balance easy player recognition/familiarity from other games with legal concerns (we don't want to use other people's trademarked product names if there's any real chance they could sue us). So we use weapons and names that look and sound like weapons players are familiar with. Here's the secret explanation of where the gun pun names come from.

This page is about how the weapons got their names/inspiration.

PISTOLS

DevName	DB Name	Based On	Whyyyyyy?
Pistol_01	**M9**	Sig P220	Because gun nerds have always wondered what if the Sig P200 series won the US Army competition to replace the Colt M1911, instead of the Beretta 92F.
Pistol_03	**DE. 50**	Desert Eagle	'Cos the Desert Eagle is such an FPS fixture.
Pistol_04	**Simeon .357**	S&W M&P R8	A contracted mangling of "Smith" and "Wesson".
Pistol_05	**Caulden**	Colt M1911	A nod to "Catcher In The Rye" narrator Holden Caulfield, a mangling of "Colt" and "Wesson". Originally the Caulden M1906, as the trials that resulted in the Colt .45's M1911 designation actually began in 1906
Pistol_06	**Selbstadt .40**	H&K USP	USP stands for "*Universale **Selbstlad**epistole*"
Pistol_07	**Smjüth & Whetsman .40**	S&W PPC	Instead of "Smith" and "Wesson", step forward DB weapon balancemeister William "Smooth" Richens and previous audio supremo Steve Whetman
Pistol_08	**Hoigat .224**	FN Five-Seven	Named after the actual patent-holder, Fabrique Nationale d'Armes de Guerre-Herstal employee Jean-Louis Gathoye. Gathoye reversed into Hoigat. And 5.7 mm is .224 of an inch.
Pistol_09	**Arevarov 9**	Makarov PM	So, for Brink, we combined the names of the two great Soviet pistol designers Makarov and Tokarev into "Tokmak". For this pistol, based on the Makarov, we'll harvest the last halves of their names to make the Arevarov.

MachinePistol_01	**MP 400**	AR-15 platform	Ten times better than an MP40?
MachinePistol_02	**Ryburn MP**	Skorpion	A pun on the designer of the Skorpion (Miroslav Rybář), and the manufacturer (Česká zbrojovka Uherský Brod, which was originally based not in Uherský Brod but the city of Brno, from which the Bren gun's name derived). Rybar + Brno = Ryburn.
MachinePistol_03	**Tølen MP**	H&K MP5	Sort-of-a-pun on *Maschinenpis**tole***.
MachinePistol_04	**Empire-9**	Steyr TMP	We had a TMP-derivative in Brink and called it the Tampa, after TMP. This Tampa , we have decided, was based in a Yorkshire pistol called T'Empire, better known as the Empire-9.

SHOTGUNS

DevName	DB Name	Based On	Whyyyyyy?
Shotgun_01	**Hollunds 880**	Remington M870	We kept coming up with variants of "Remington" and "Mossberg" for Brink's shotguns, so we thought it was time to use none-posher pheasanticidal-toolmaker Holland & Holland
Shotgun_02	**Remburg 7**	Remington M870	Remburg is another mashup of "Mossberg" and "Remington"
Shotgun_03	**Ahnuhld-12**	Chiappa 1887	As used by Arnie in Terminator 2, of course.

SUBMACHINE GUNS

DevName	DB Name	Based On	Whyyyyyy?
SubMachineGun_01	**SMG-9**	AR-15 Platform	The most basic possible 9mm Submachine Gun name.
SubMachineGun_02	**Hochfir SMG**	H&K MP5	*Hoch* from Heckler/Koch and *fir* from the German for five
SubMachineGun_03	**KEK-10**	H&K MP5	A re-arranged Koch/Heckler that wasn't just "Kock". We'd already done the Hockler in Brink.
SubMachineGun_04	**Crotzni**	AK-74SU	In Russian the SU of "AK-74SU"stood for "*Skladnoy Ukorochenniy*" or "folding, shortened", so we shortened the word "shortened" into "Crotzni"
SubMachineGun_05	**Blishlok**	Thompson M1928A1	The Blish Lock was a breech locking mechanism designed by John Bell Blish used in the Thompson SMG. It didn't work.

ASSAULT RIFLES

DevName	DB Name	Based On	Whyyyyyy?
AssaultRifle_01	**M4A1**	AR-15 Platform	Because it's too well known to mess with. Probably.
AssaultRifle_02	**BR-16**	AR-15 Platform	What's one better than an AR-15? A BR-16, obviously.
AssaultRifle_03	**Dreiss AR**	H&K G3	From the German "*drei*" and a play on the revolutionary Dreyse needle-gun, forerunner of the modern bolt action rifle.
AssaultRifle_04	**Timik-47**	AK-47	Mikhail Kalashnikov's original prototype for what ended up as the AK-47 was named "Mikhtim" from his first names Mikhail Timofeyevich, so we just reversed the names.
AssaultRifle_05	**Hurtsall 2K**	FN F2000	Hurtsall is a pun on Herstal, the Belgian city where FN is based.
AssaultRifle_06	**SHAR-C**	SCAR-H	Re-order of the FN (Fabrique Nationale d'Herstal) SCAR-H (**S**pecial Operations Forces **C**ombat **A**ssault **R**ifle - Heavy)
AssaultRifle_07	**Stark AR**	Steyr AUG	Soundy-likey for "Stire owwguh", which is what "AUG" more or less sounds like in Austrian. Sort of.

MACHINE GUNS

DevName	DB Name	Based On	Whyyyyyy?
MachineGun_01	**Mk46**	FN M249	The US Special Ops version of the standard M249 LMG.
MachineGun_02	**K-121**	MG21	A more intimate, 1-to-1 version of the MG21, m'kay?

SNIPER RIFLES

DevName	DB Name	Based On	Whyyyyyy?
SniperRifle_01	**MoA SNPR-1**	AR-15 Platform	MoA (or Minute of Arc) is a measurement of accuracy. Snipers yearn for a rifle that will shoot less than 1 degree MoA i.e. 1 inch at 100 yards. SNPR for "sniper", of course.
SniperRifle_02	**PDP-70**	HK PSG-1	As well as "*Präzisionsschützengewehr*", PSG also stands for Paris Saint-Germain, a French Ligue 1 football club (only formed in 1970!), who play at the **P**ark **D**es **P**rinces.
SniperRifle_03	**FEL-IX**	Gepárd Lynx	The original managed to be named after both the Cheetah and Lynx, so we just continued the feline theme.
SniperRifle_04	**Grandeur SR**	M14	The M14 was itself a fancier version of the M1 Garand, so we made "Garand" fancier and ended up with Grandeur. It's even Garander than the Garand.

MAP DESIGNS

GALLERY

"Mad about concrete"

VISION

- **Good pacing and flow**
    - Time to choke point: 8 – 12 seconds
    - Time to objective: 18 – 24 seconds
    - Time to rotate *(Pylon A to Pylon B):* 10 – 14 seconds

    "If it feels long, it is long!" DRASKA

- **Balanced for both attackers and defenders**
    - Each vantage point will have an equally strong counter
    - Risk versus reward
    - Avoids dominant strategy

- **Simple layout.**
    - The layout will be simple to learn after a few rounds of playing
    - Player Guidance. All routes are well sign posted
    - Strong Visual Language and Readability

- **Optimised for 5v5.**
    - 3 Primary routes. The main path a player will take
    - Additional secondary/flanking routes. If a primary route is locked down, a flanking route will give access. Possible risk versus reward
    - Connecting routes. Ability to switch route without having to back track all the way to spawn

- **Caters to all Mercs (short, medium and long range)**
    - All mercs will be useful in key areas around the map.

- **Makes use of all gameplay mechanics.**
    - Trick Jumps.
    - Air Support.
    - Deployables.

- **Unique Architecture**
    - Brutalist style different from other maps
    - Grunge and Graffitti
    - Skatepark

THE SETTING

- Inspired by the South Bank Centre in London
- Large commercial centre that features the Hayward Gallery and National Theatre
- Multi-storey, Brutalist architecture under CDA control
- Raw grungy concrete
- Graffiti
- Solid geometric shapes

MAP FLOW
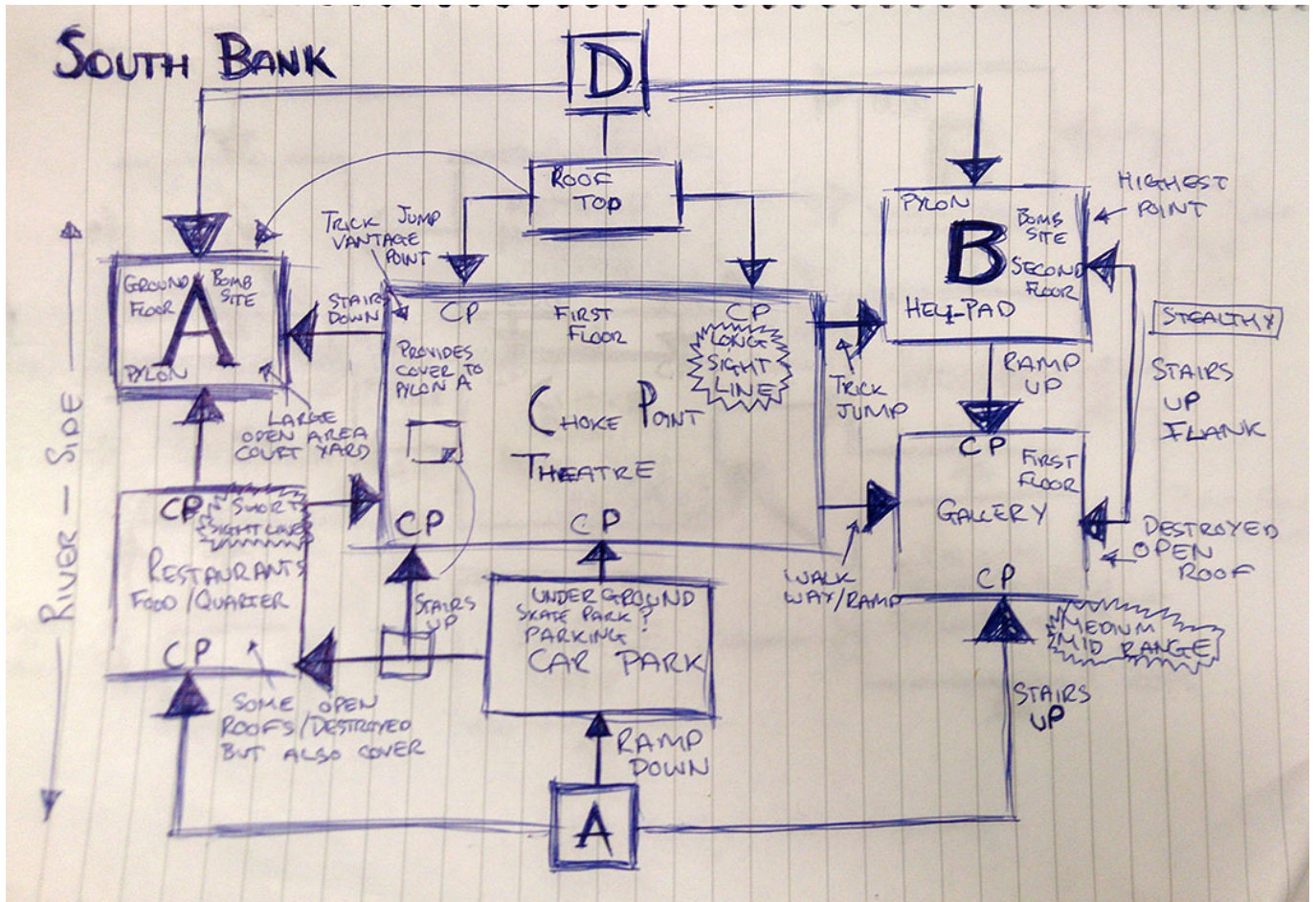
FIRST PLAYABLE BLOCKOUT
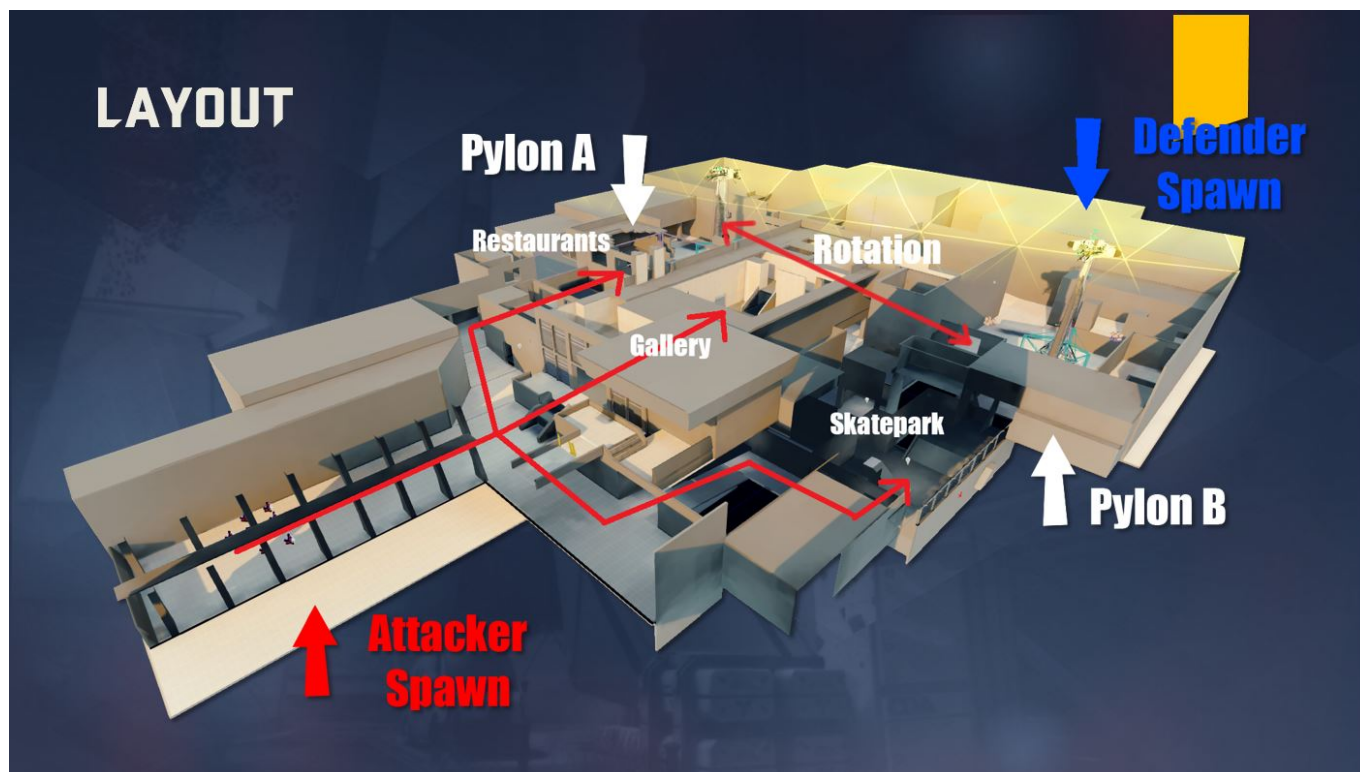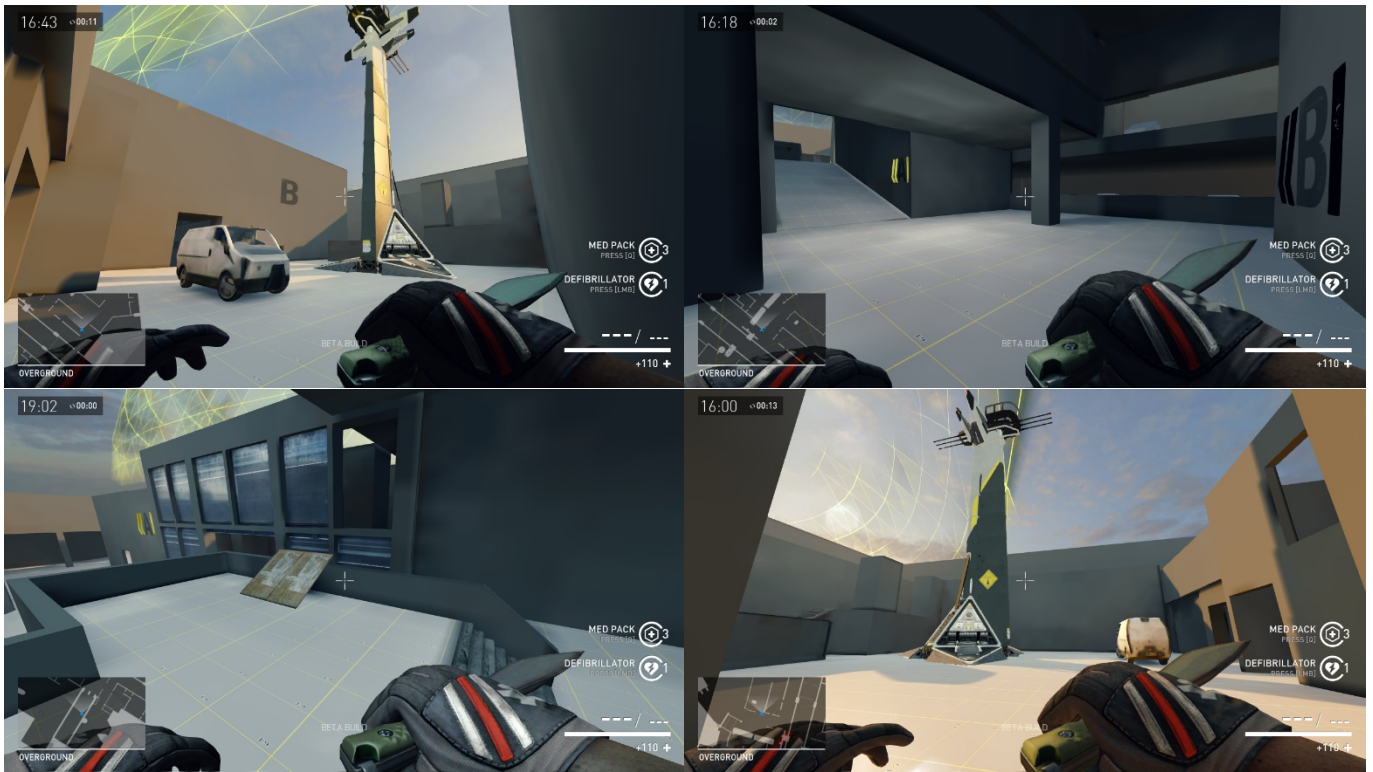
EARLY ART TESTS

FIRST PASS ART

TERMINAL REDUX

"The Directors Cut Volume 2"

OVERVIEW

Progressive objective completion is key to the enjoyability of Dirty Bombs objective game mode, maps should allow players to progress through the maps objectives and in stopwatch the winner should be determined by who completed all the objectives fastest. Attackers should be able to get past the first objective nearly every time, currently in Terminal they do not with a completion rate of only ~65%.

GOALS

Reduce terminals low first objective completion rate by:

- Reducing Long Travelling Times - Spawn to first encounter/ objective is too long, we need to reduce this to more normalised distances and number of routes
- Remove Capturable spawn - the spawn times only work after the spawn capture, we won't need this anymore
- Resolve the difficult plant location - the flat wall is a horrible objective to plant on as you must watch a full 180 degrees when planting, we need a more traditional plant site
- Create a front-Line - Players are unsure where to set up defence because there isn't a solid front line, we need a more structured combat arena just before the objective site

OBJ1 - New Map Layout

General Changes -

- Complete redesign of layout
- Maintaining certain visual elements and locations
- New Primary
- Removal of Secondary's
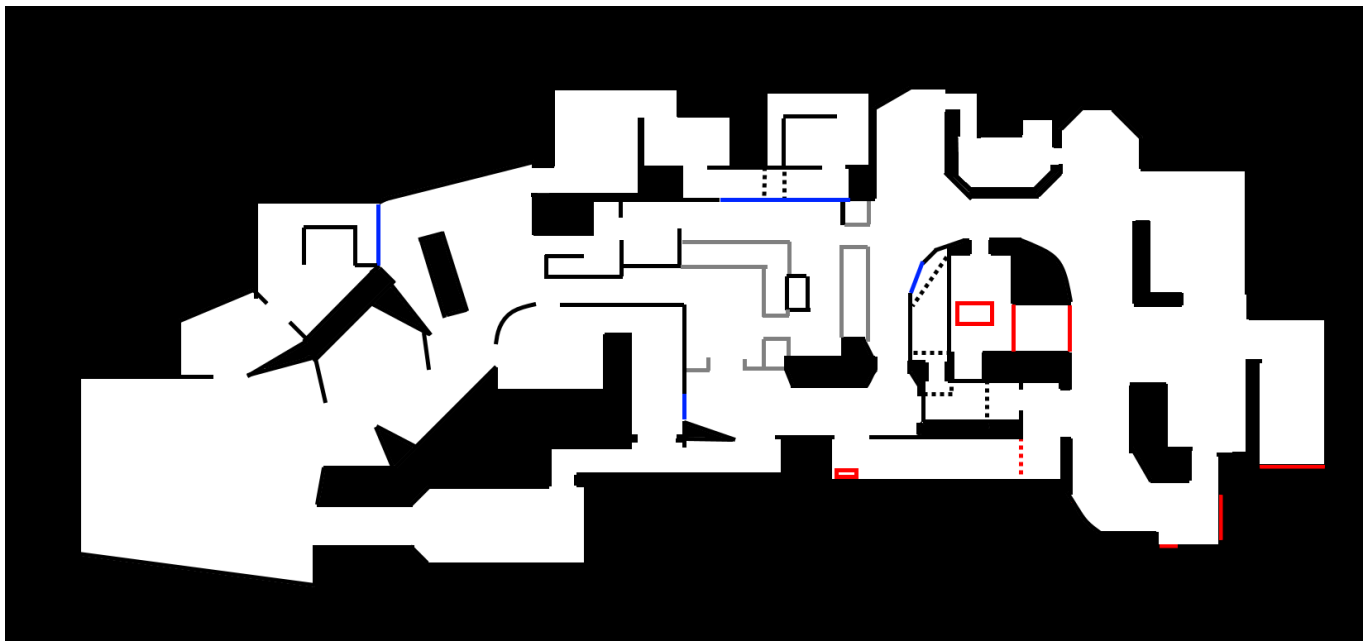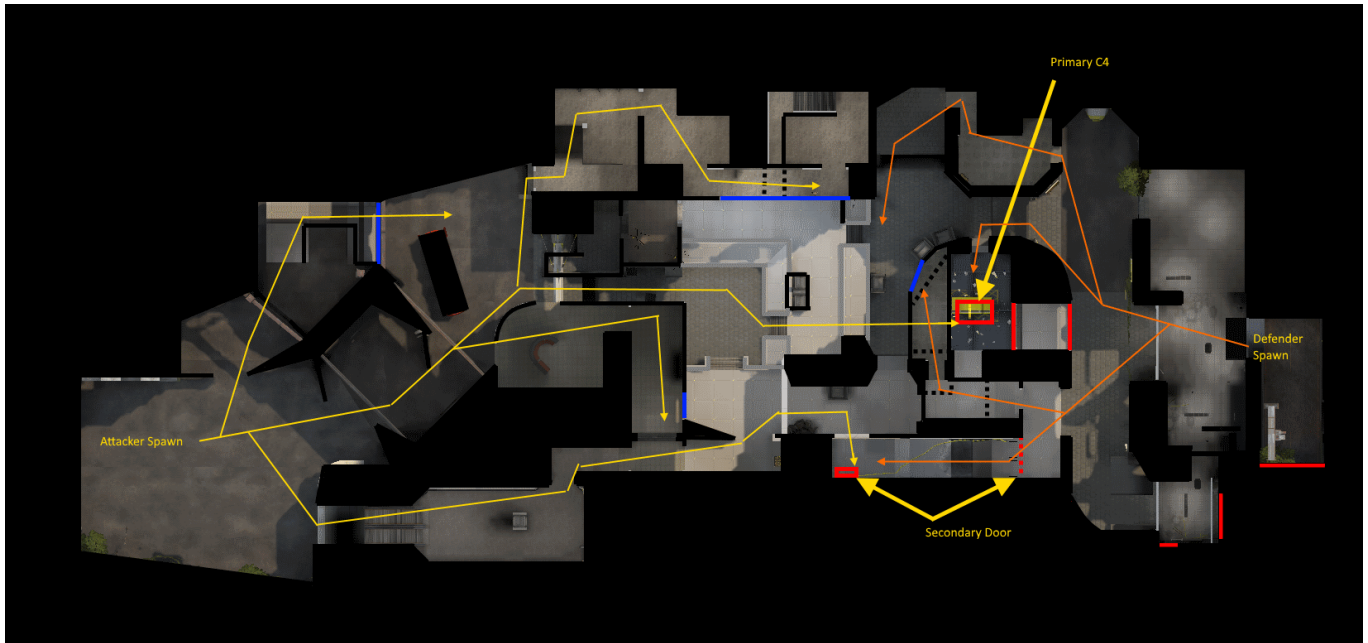
1. Attackers Spawn

Attackers spawn is in the same car park as old terminal but moved into a new location.

2. Attackers Mid Route

Attackers take a mid-route under the bridge and then it splits into several paths

3. Secondary Objective

The secondary for the map now closes off one of the defenders' routes into the arena

4. Arena

The arena now has a clearer front line across the centre of the arena with the objective just beyond.

5. MG-Nest

The balcony is very much the same as before

6. Office Window

The office window on the right flank is still there for attackers

7. C4 Site

The objective site is now in a covered area under the tube station balcony
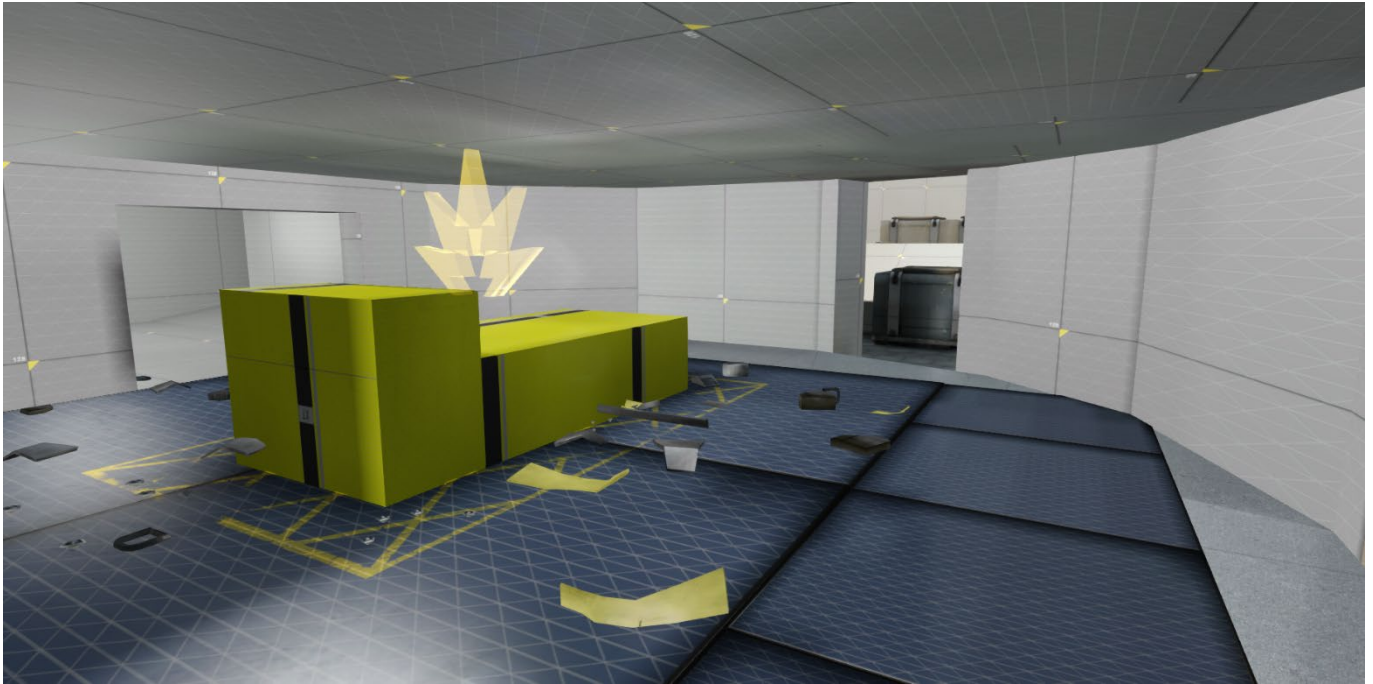
8. Defenders Spawn

Defenders spawn is where their alternate spawn used to be under the train bridge

9. Defenders Mid Route

Defenders have a main route that takes them into the objective site and a relief route that takes them around to the right flank

274.

DOME REDUX

"The Directors Cut"

OVERVIEW

Dome is currently the least played map in Dirty Bomb's map pool. To improve this, we will be making several changes to address the following issues –

- Poor Flow - The maps flow is confusing with many hard-right angles
- Long Travelling Times - Spawn to first encounter/ objective is too long
- Split Team - The layout causes the team to split immediately committing players to each route with no way of switching quickly between. This results in sneaky deliveries
- Lack of Front-Line - Players are unsure where to set up defence because there are too many fronts to keep track of
- Optimisation - Players generally get a lower FPS compared to other maps

GOALS

- Reduce Long Travel Times - Spawn to first encounter/ objective is too long, we need to reduce this to more normalised distances
- Reduce Number of Routes - The layout needs simplifying to direct players down fewer routes
- Simplify Flow - Improve the flow of the map
- Optimise - Improve optimisation of the map to improve FPS
- Create a Front Line - Players are unsure where to set up defence because there isn't a solid front line, we need a more structured combat arena just before the objective site

OBJ1 - NEW MAP LAYOUT

General Changes -

- Removed entire right route to fix split team issue and help with optimisation
- Shorter travel times for both attackers and defenders
- Improved/ simplified flow
- Defined front-line
- Added new flank route
- Added spawn camp relief route
- Removed secondary door
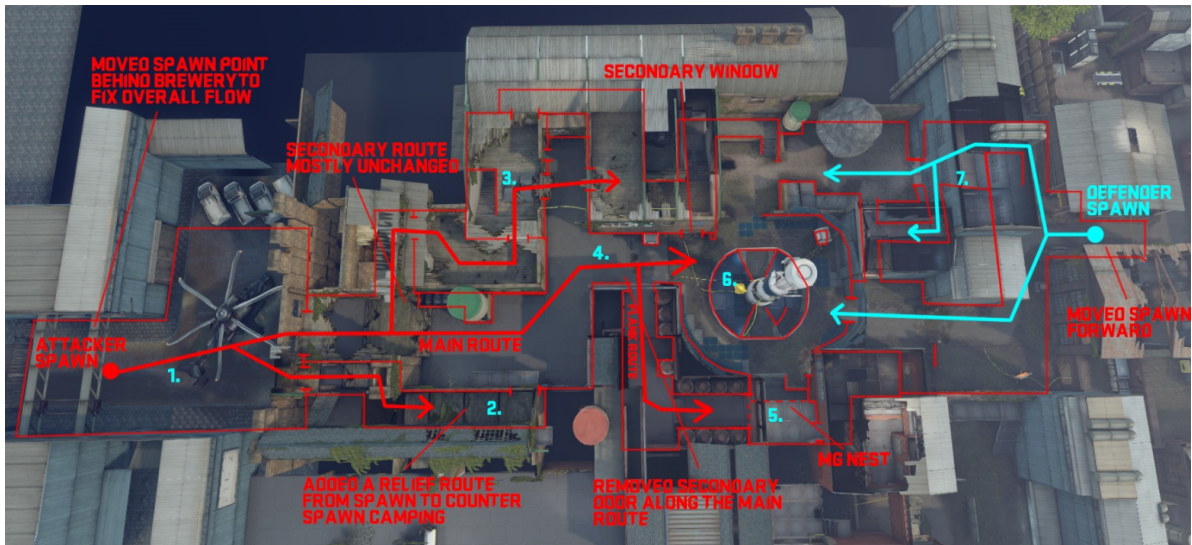
1. Attackers Spawn

Attackers spawn is now located behind the Old Brewery. This fixes the issue of flow with its now simplified primary route directly to the objective. With this change travel times are now shorter.

2. Relief Route

This route has been added to help prevent spawn camping by giving attackers an extra route and the the high ground.

3. Secondary Route

This route is mostly unchanged. The secondary generator now opens a window that overlooks the delivery site.

4. Primary Route

The primary route into the objective area has been widened. The secondary door has been removed to simplify the flow into the area. This is now the front-line and choke point. New defensive positions have been added and the MG is now a strong position for defenders (See 5). A new flank route has been added to give attackers the chance to break through front-line.

5. MG-Nest

The MG-Nest is now a strong defensive position for the defenders. It effectively has eyes on all entry points to the delivery pit. The exit to the flank route is located below, giving attackers a chance to sneak through.

6. The Delivery Pit

Removed a set of stairs from the delivery pit that allowed the defenders to camp there. Players can now trick jump out of the pit.
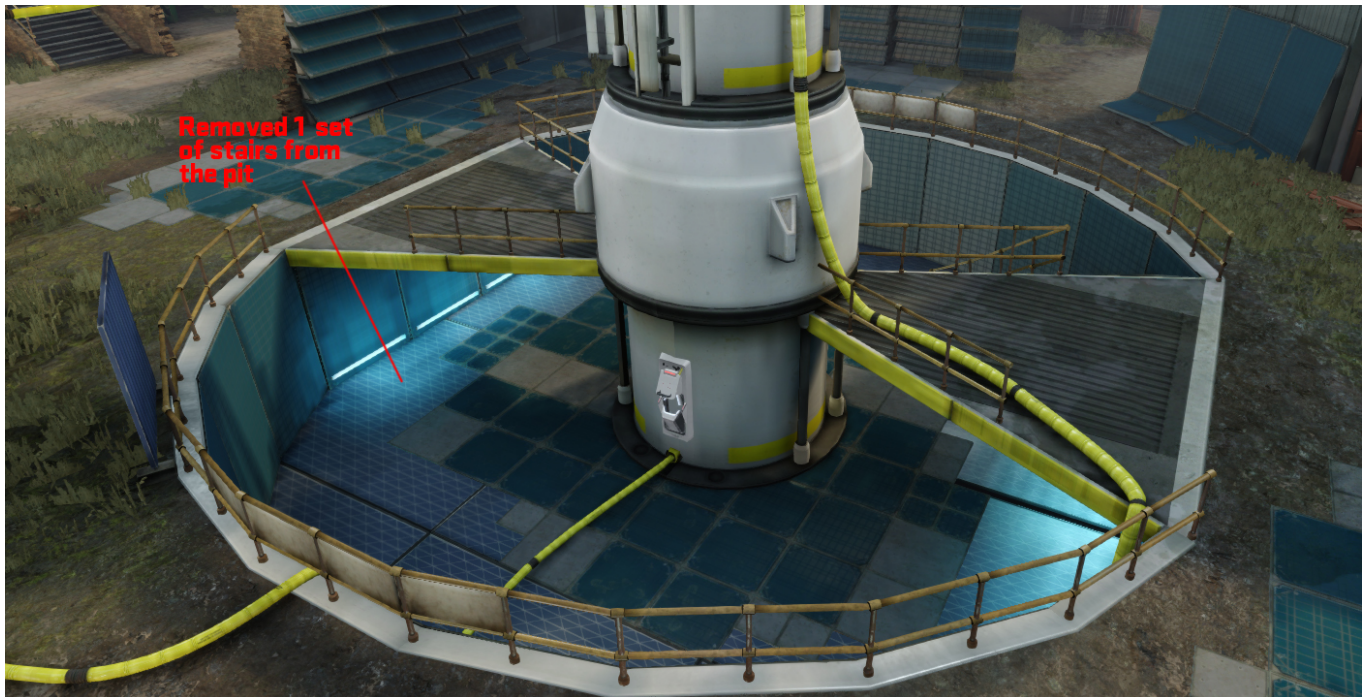
7. Defenders Spawn (Right Route)

Defenders spawn has been moving forward to shorten travel times. Empty space on the right route has been filled. Access to the higher ground is now more straight forward to get to sniper position.

OBJ3 - NEW MAP LAYOUT

General Changes -
- Removed entire left route to fix split team issue and help with optimisation
- Shorter travel times for both attackers and defenders
- Improved/ simplified flow
- Added new flank route

VAULT

"Heist Heist Baby!"

VISION

- **Bring it back to the heart of London**
    - o   Previous maps have been located on the outskirts

- **The Art of the Steal**
    - o   Play on the stereotypical London Bank robbery theme
    - o   "Oceans 11" and "Lock Stock & 2 Smoking Barrels"

- **Colossal Architecture**
    - o   Grand Facades
    - o   Prestigious Arenas

- **Iconic London**
    - o   London Buses
    - o   Post Boxes
    - o   Phone Boxes

THE SETTING

- The City of London Financial District
- Modern & Neoclassical Architecture
- Large Scale Imposing Structures
- Courtyards & Alleyways

NARRATIVE

Jackal, now in possession of the airships holo-drive have deciphered its contents...

The CDA are storing the plans to the containment shield in the vaults of the Royal Exchange. Jackal want these plans to find weaknesses in the Containment Shield.

Infiltrate the Royal Exchange and steal the plans!

OBJECTIVES

- **OBJ1 - Destroy the AA Control Centre**
  CDA have anti-aircraft weapons in the area. Use C4 on the AA control center to bring the weapons offline.

- **OBJ2 - Get into the Vault**
  Plant C4 on the Vault door and steal the energy cores.

- **OBJ3 - Deliver the plans to the Extraction Point**
  Deliver the energy cores to the extraction point for extraction.

SECURITY
OVERIDE
ENABLED
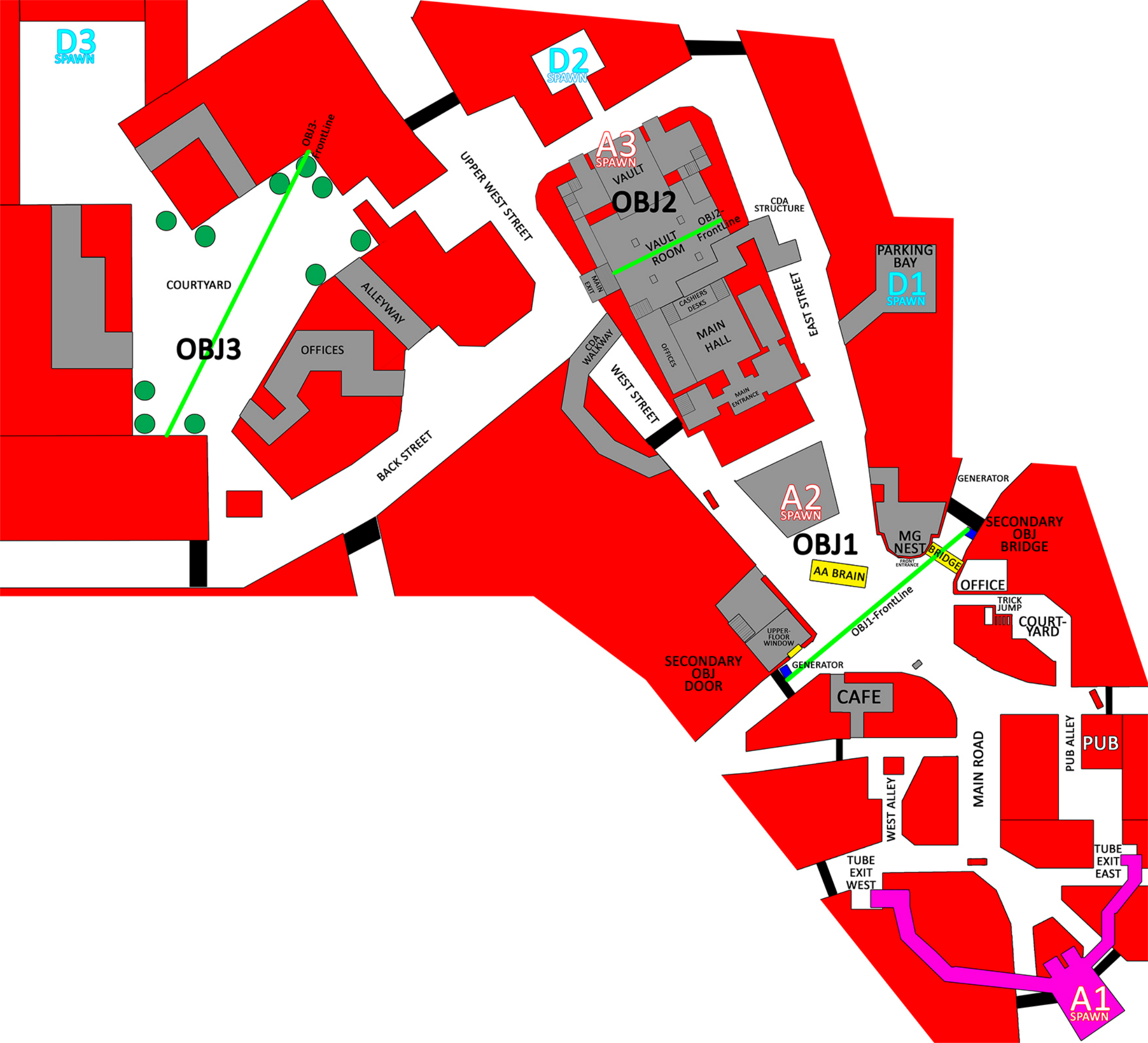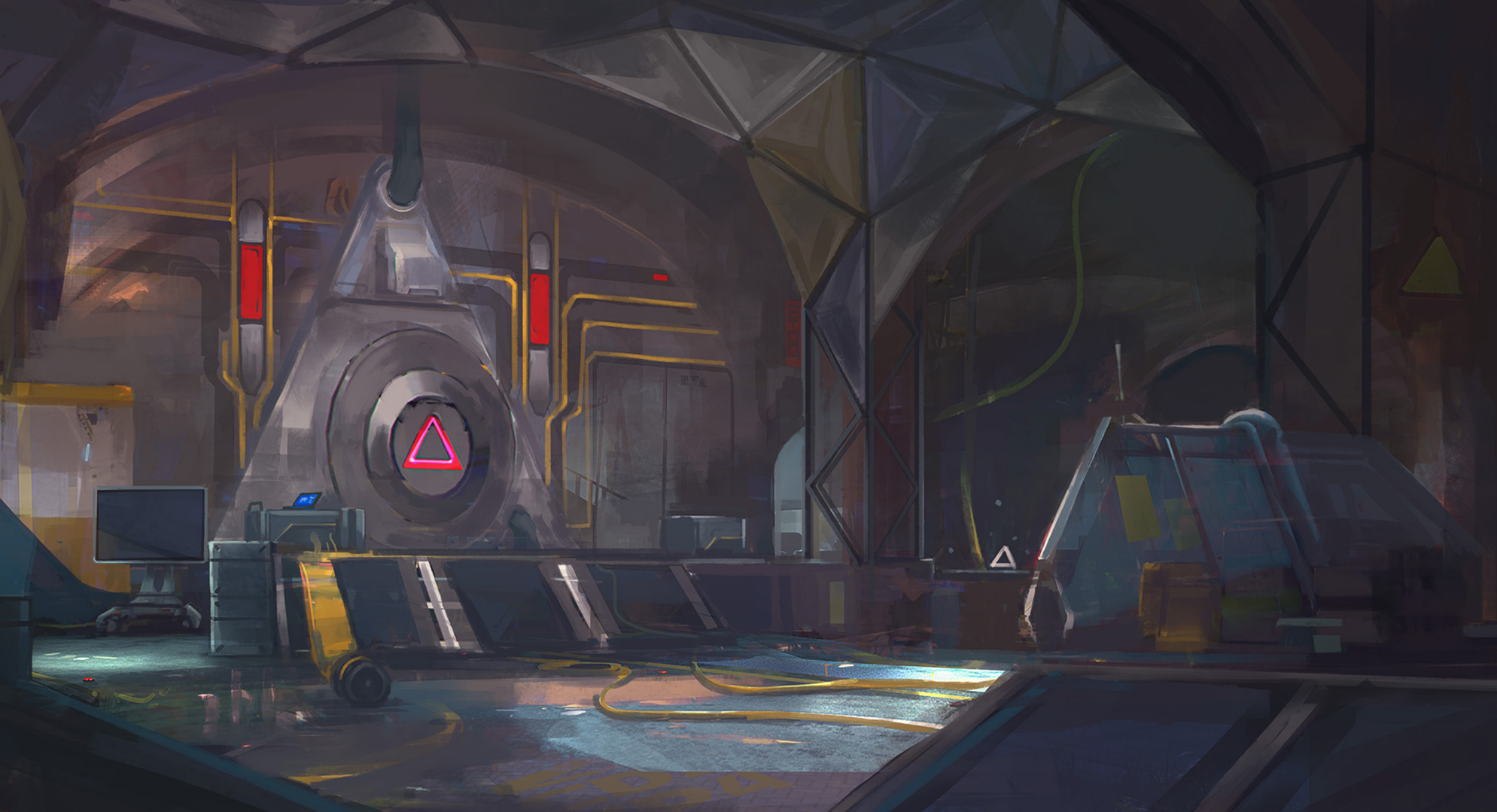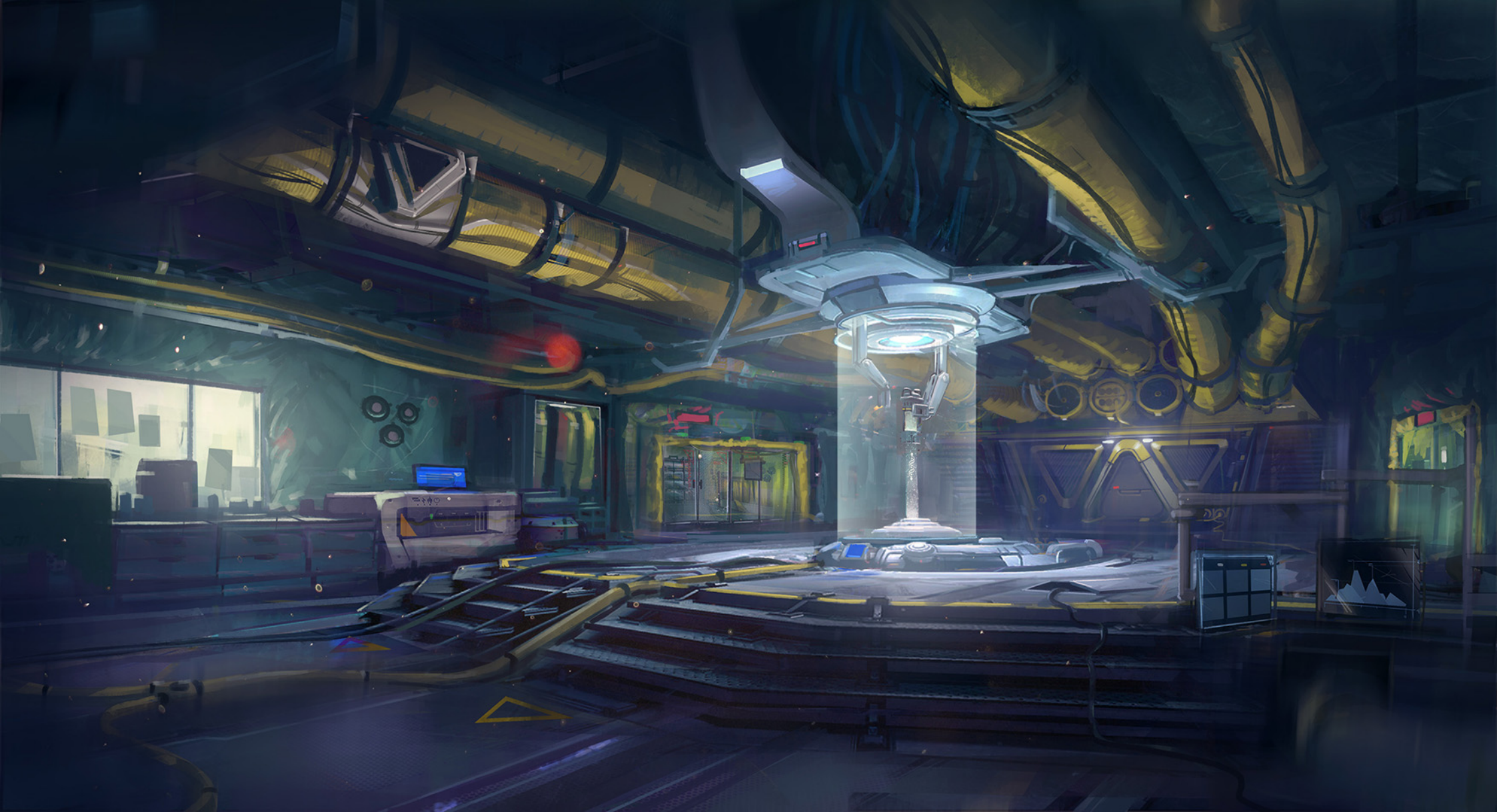
PTS BLOCKOUT TEST

OBJ2
HEIST
BLOCKOUT MAP
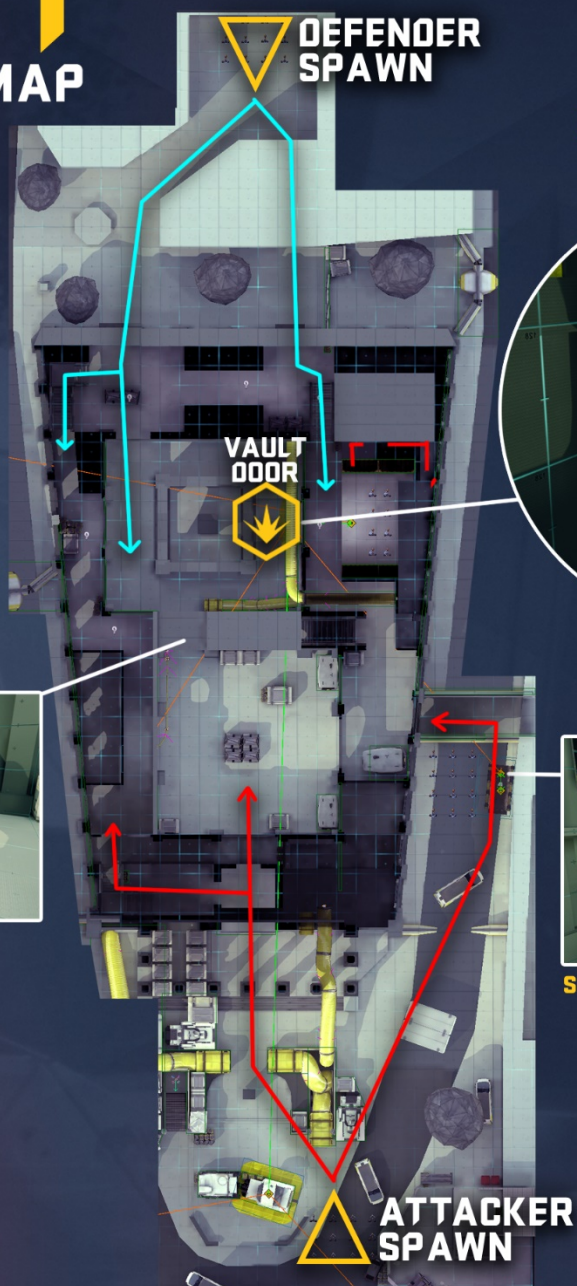
DEFENDER SPAWN

OBJ 2 - PLANT C4 ON THE VAULT

VAULT DOOR
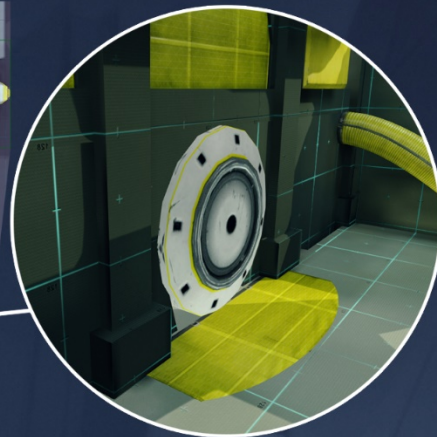
SECONDARY: DOOR

SECONDARY: RAMP

ATTACKER SPAWN

OBJ1 HEIST
BLOCKOUT MAP

OBJ 1 - PLANT C4 TO DESTROY AA SITE

SECONDARY: GAS TUNNEL
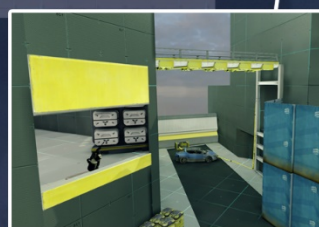
ATTACKER SPAWN

DEFENDER SPAWN

AA CONTROL CENTRE

MG NEST

SECONDARY: BRIDGE

OBJ3
HEIST
BLOCKOUT MAP

DEFENDER SPAWN

TRANSITIONAL DEFENDER SPAWN

EXTRACTION POINT

OBJ 3 - DELIVER DATA-CORES TO EXTRACTION POINT

ATTACKER SPAWN

SECONDARY: DOOR
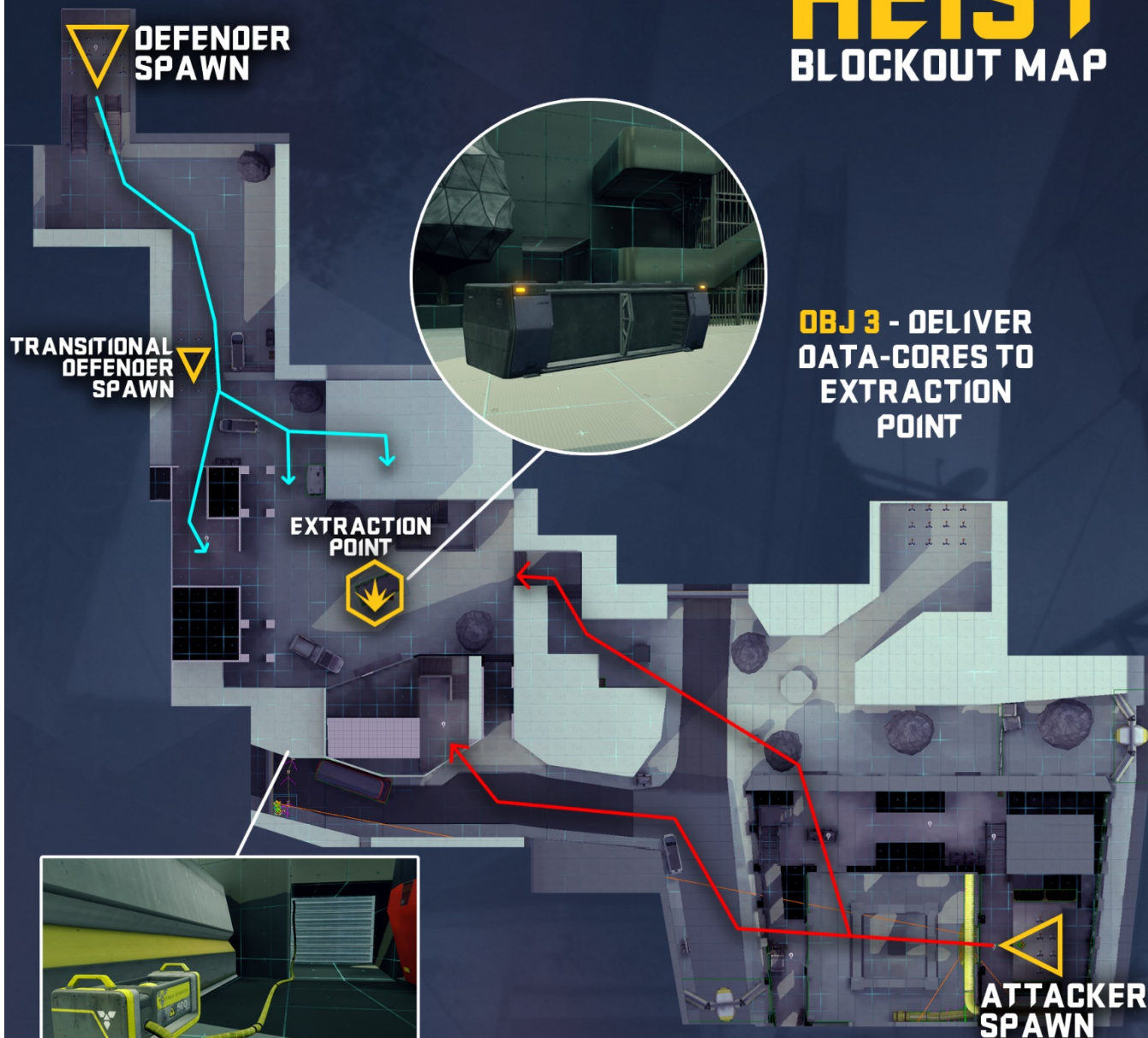
CASTLE

"Storm the tower!"

VISION

- **Gameplay**
    - Actual setting offers much inspiration for gameplay opportunities
    - Allows for flexibility in layout and gameplay spaces
    - Potential for meaningful, consequential objectives
    - Large structures and exclusive areas allow for cheap optimisation opportunities
- **Art**
    - Opportunity for impressive architecture and visuals
    - Distinctive setting from existing content
    - Development opportunity to create new kit sets for future re-use
- **Narrative**
    - Clear motivation for both Factions
    - Ties in with Heist (Story Arc)
    - Central Location (Timeline)

THE SETTING

- Both Modern & Historic London
- Large, Imposing structure
- Broad variety of Architecture
- CDA's parasitic architecture
- Homage to company roots

NARRATIVE

Jackal plan to raid the CDA controlled Tower of London.

As it is a naturally fortified area, the CDA have repurposed the tower to guard the other half of the 'Key'.

Jackal acquire an EV to destroy entrance points to each layer of the castle, culminating in the destruction of the Tower.

Destroying the tower roof allows a Jackal Helicopter to air lift the 'Key' out

WRITER'S NOTE

Jackal plan to raid the CDA controlled Tower of London.

The CDA have re-purposed the original Medieval castle to guard the other half of the 'Key' required for Jackal to reveal the Sarcophagus. You know, the one they built around the original Dirty Bomb ground zero. Or rather, the site of the Event they staged the entire Dirty Bomb black op to cover up. They weren't checking for radiological contamination around the Zone, they were re-contaminating it, every time. They staged Dirty Bomb attacks to force an evacuation away from the original Event. And inside the Sarcophagus, hidden from prying satellites and ground recon is...it's...what's that? Who'd be knocking at this time of night? I'll just go s
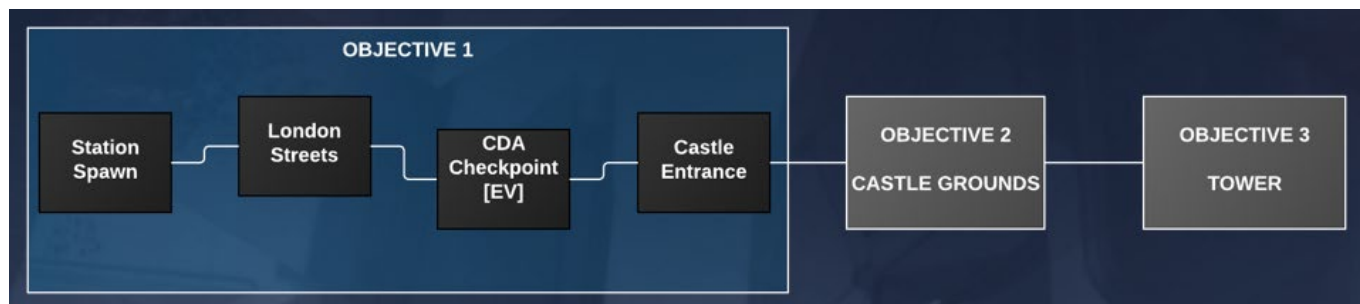
OBJECTIVES

- **OBJ1 - Repair the EV (Destroy the door)**
  Repair the EV to shoot the bridge entrance open

- **OBJ2 - Escort the EV (Progress through the castle grounds)**
  The EV is escorted through the outer ward and village area, to a position where it can fire missiles at the main door of the Tower

- **OBJ3 - 2 C4's (Destroy the Tower)**
  Once Jackal gain access to the Tower, they use C4 on the support pillars to collapse the roof, allowing a Helicopter to airlift the package out.
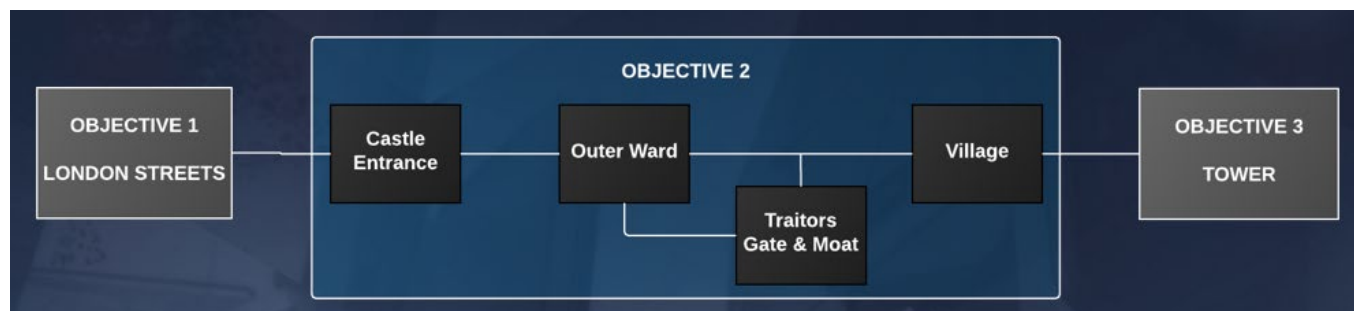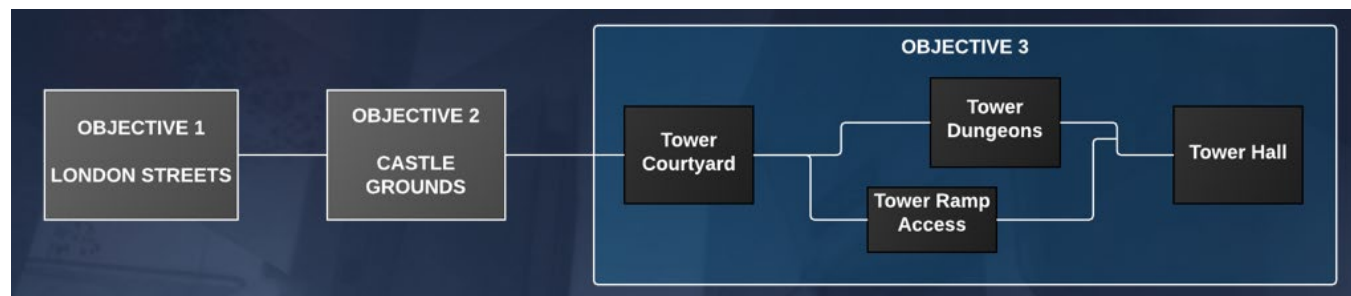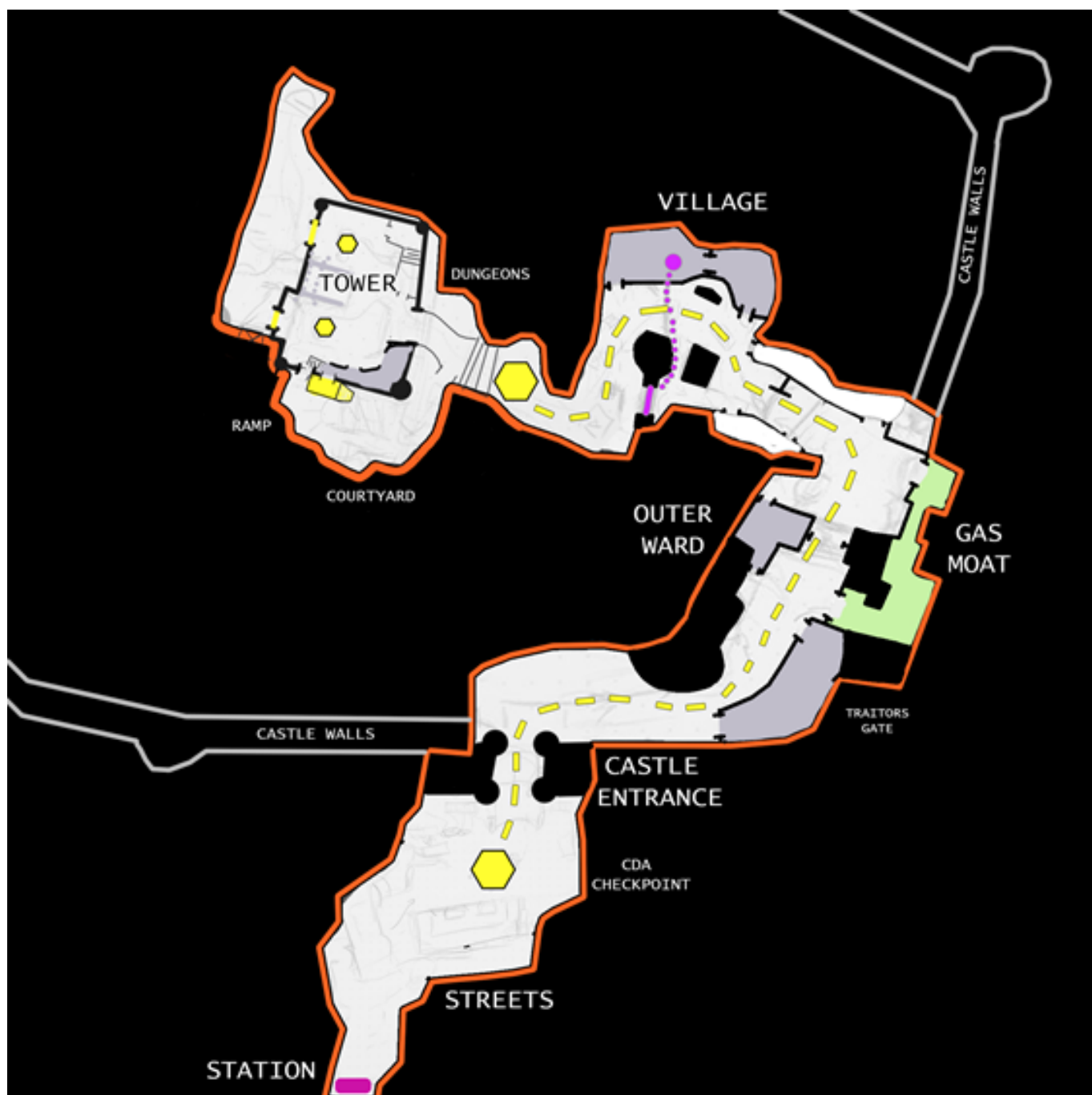
MAP FLOW

OBJ1 - Repair the EV
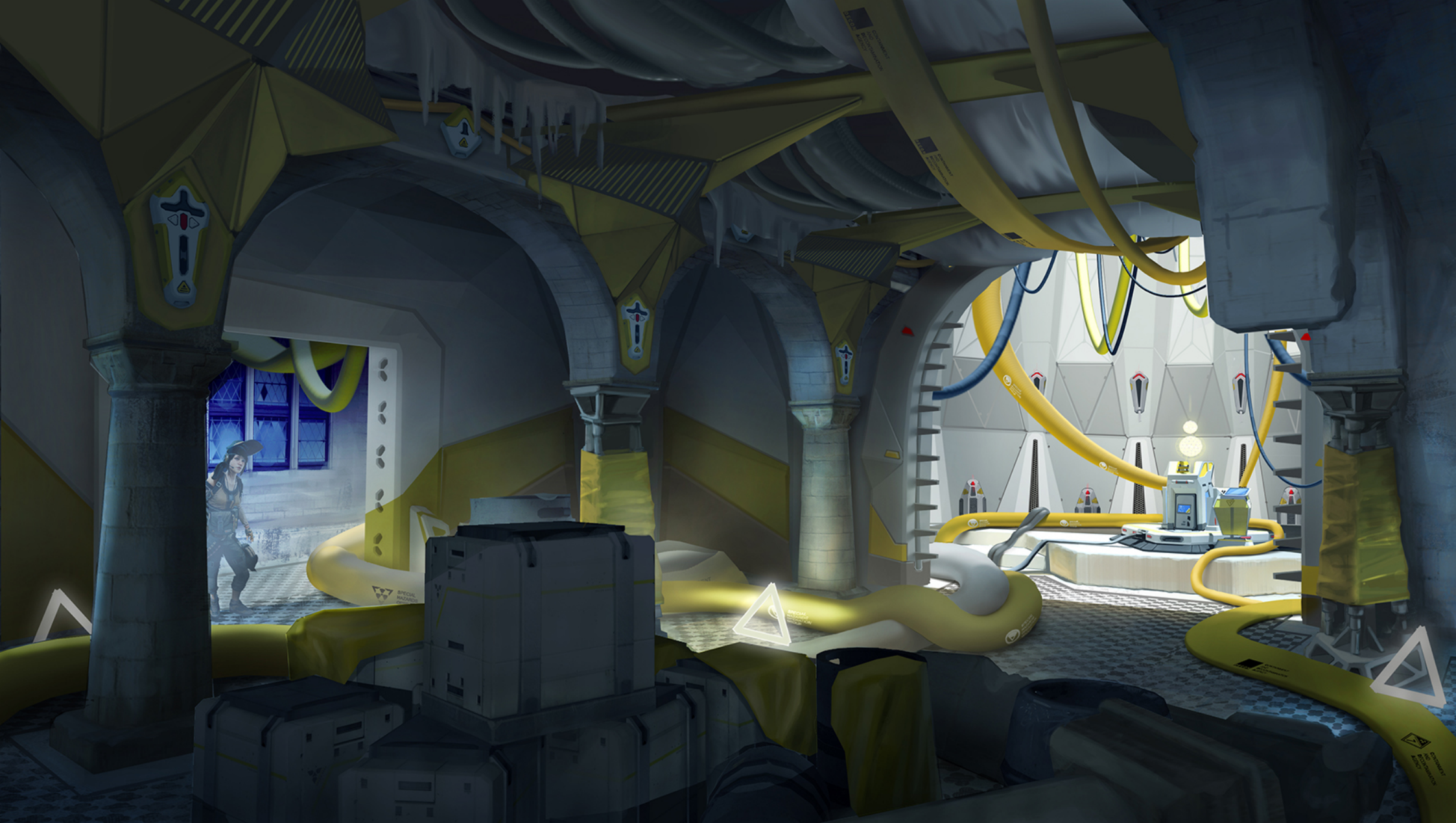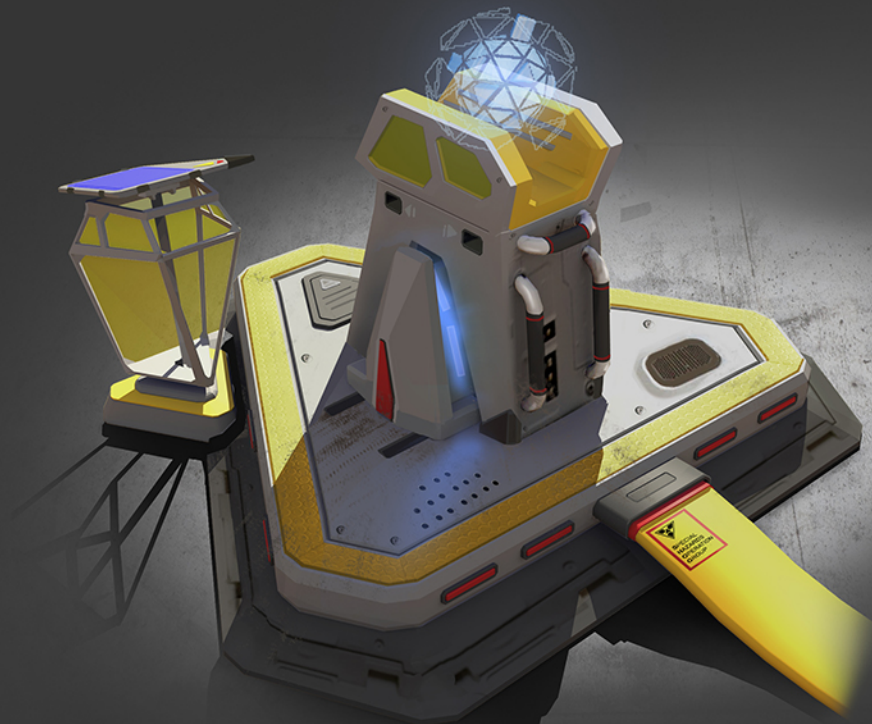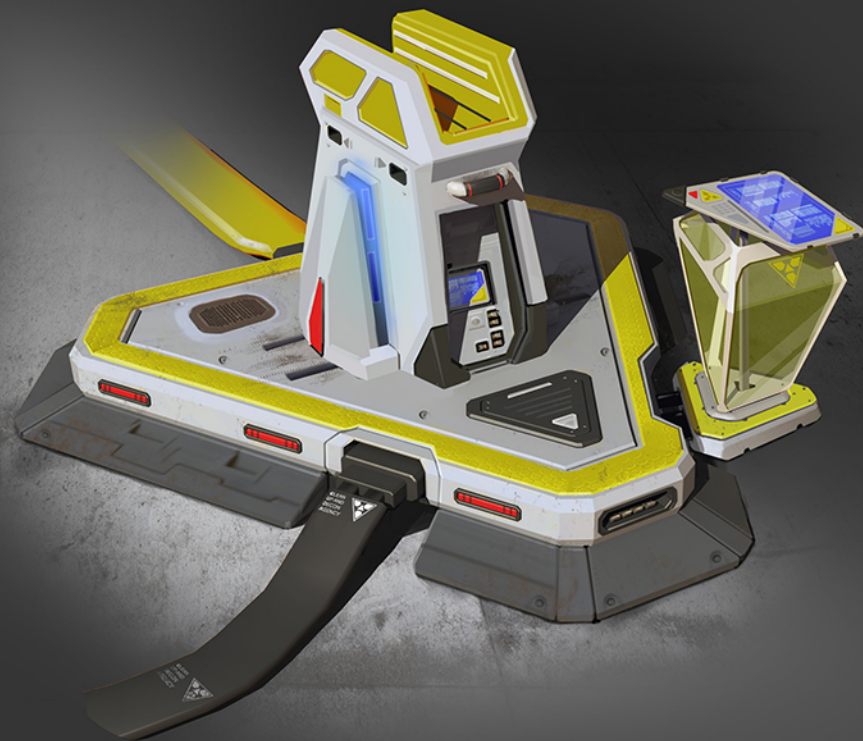

OBJ2 - Escort the EV

OBJ3 - 2 C4's

LAYOUT

Map labels: VILLAGE, TOWER, DUNGEONS, CASTLE WALLS, RAMP, COURTYARD, OUTER WARD, GAS MOAT, TRAITORS GATE, CASTLE WALLS, CASTLE ENTRANCE, CDA CHECKPOINT, STREETS, STATION

Resonator
Castle map

TANK +
SAFETY CAPS

WALL
DISPENSER

LEFT/RIGHT SIDE

FRONT/BACK

VALVES

CLAMPS

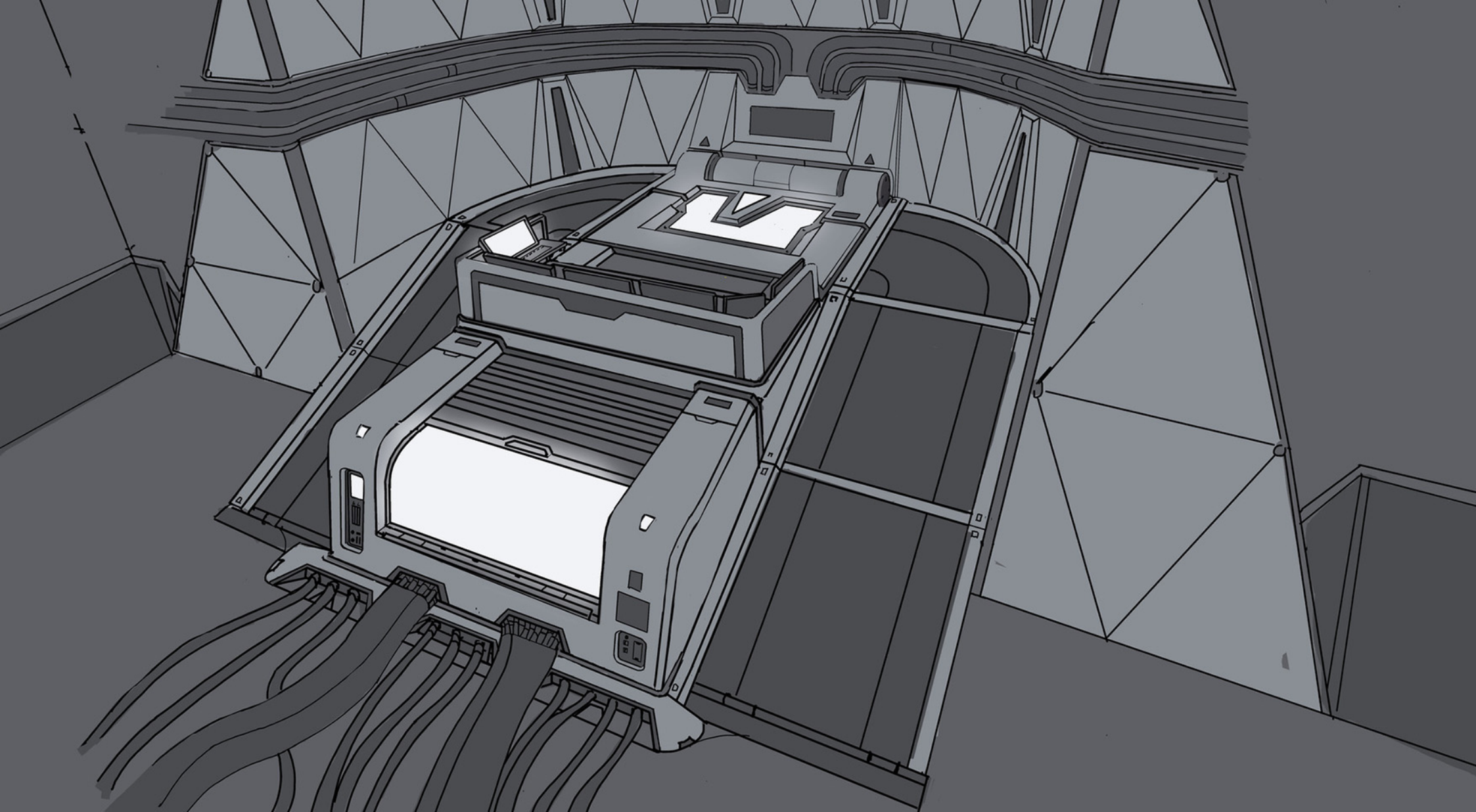CDA
DECON GAS TANKER
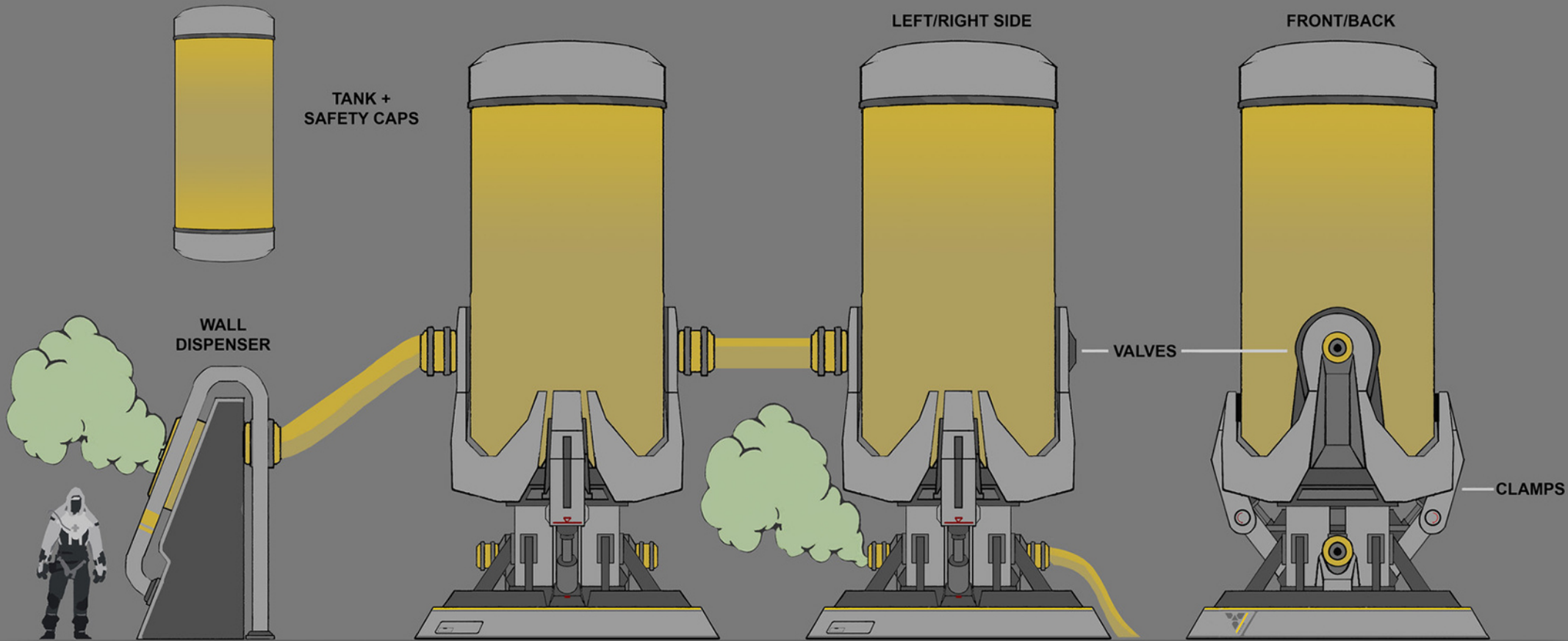
CDA hole caps

a loudspeaker devise of another time of wave transmitter powered by the cables and getting and sending info with them as well

front

back

HELLO, WE'RE
SPLASH DAMAGE

Here at Splash Damage we are dedicated to crafting team-based multiplayer games that ignite friendships as much they do the competitive spirit. Having risen from the competitive community in 2001, we're driven to putting players first in the worlds they love.

The iconic universes of Gears of War, Batman, Doom, Quake and Wolfenstein have all had the Splash Damage treatment, along with our own creations like Dirty Bomb, RAD Soldiers and Brink.

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GEARS 5

GEARS TACTICS

UNANNOUNCED ORIGINAL IP

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So who are Splash Damage? Well, with nearly two decades of development experience under our belts, you may have heard of us. It's very likely you've even played some of our titles. But we're more than just our games. We're our people, our partnerships, our relationships.

As a long established studio, we have a rich and deeply ingrained culture, centered on the values that our business is based upon. These values are our way of life.

THE SUNDAY TIMES
100
BEST COMPANIES
TO WORK FOR
2018

WORK AND LIFE, BALANCED
We believe that staff do their best work when they're happy in and out of the office.

FRIENDS, NOT COLLEAGUES
We started out as a small group of friends and have never lost that culture. Our offices are much better now, though.

LEVEL UP YOUR SKILLS
We're dedicated to unlocking your potential through a constant focus on learning and development.

BE TRUSTED TO SUCCEED
Autonomy is immensely powerful. We trust our teams to come up with the solution that's best for the challenge at hand.

BENEFITS

Our people are our biggest strength, and we're committed to growing and developing our teams professionally and personally.

With ground-breaking leadership and employee development programmes, industry leading study materials and a benefits package that's one of the best in the business, with progressive staff initiatives such as ten weeks paternity leave, high end health and dental care, game and book libraries and free gym membership.

It's no coincidence that this year we've become the first games studio to feature in the Sunday Times Best 100 Companies.

FIND OUT MORE ABOUT HOW WE COULD BECOME PART OF YOUR FUTURE, AND YOU OURS;
VISIT US AT SPLASHDAMAGE.COM/CAREERS

17 YEARS OF DEVELOPMENT