

## Joseph Cecot

## Shot List - Call of Duty 4: Double Extraction



### Mission Intro

- Programmatically generated first person punch reaction by linking player to entity and rotating while blurring and fading screen.
- Re-used animations of Captain Price beating Al-Asad for initial soldier beating sequence.
- Used this same animation again only turned to face the player's view.
- Scripted whole sequence including punch and pain sounds, slow motion gun aim, sniper shots, blood fx, flashbang and Price breach.



### Exiting Building

- Scripted intro of sniper team explaining who shot through the windows in the opening cinematic.
- Transition to the outside is emphasized by both the sound of the helicopter fly by and the music picking up.
- Helicopter foreshadows the later helicopter encounter in the defend sequence.
- Scenario is scripted to wait for the player if they are lagging behind.



### Ambush

- Scripted Price and team to take cover as the jeep approaches.
- Scripted vehicle to drive up and have the driver exit.
- Area is setup to detect if the player is both standing and too close to the jeep as it approaches. If this happens the AI is alerted.
- If the player kills the enemy Price tells them good job, otherwise he just says let's go.



### Travel Road

- Snipers scripted to hop the fence on the right and take defensive positions.
- Price waits for the player at the logs and then moves down the road.
- If the player doesn't follow Price and heads into the road, Price instructs player to follow.
- Tank is spawned and travels by the enemies set up at the gate entrance.



### Optional Tank Encounter

- Enemies are scripted to become alerted when a bullet goes by, when they take pain or when the player gets too close.
- If the tank is still in range it will also turn and attack the player.
- Back up enemies also spawn from the other side of the gate.
- Intense music is played if the player alerts the tank team.
- If the player obeys Price's directions and ignores the tank and AI the player can avoid this encounter.



### Enter Breach Building

- If the player has not alerted the tank enemies price will alert the sniper team that they are in and tell the player the objective should be in the next room.
- If the player has not alerted the tank an enemy spawns in the next room that the player and Price have to deal with.
- If the player did alert the tank team price will sprint into the building and yell instructions to move exclaiming the objective may still be alive.



### Breach Sequence

- Whole opening the door and sliding in breach sequence was programmatically created by linking the player to an entity and both interpolating and rotating that entity into new positions over time.
- If the player doesn't shoot the middle enemy soon enough he will kill Griggs.
- The animation of the attack is the same punching sequence seen twice in the intro. In this instance the animation has been fast forwarded to a point that both skips the punching and makes the breach fun.

### Defend: Battle System

- Created battle system in script that keeps track of all available cover locations. Each location is flagged with whether it's in use as well as when it's last use was.
- In the battle system initialization all cover locations are stepped through using recursion to seed them with their initial use data.
- The battle system spawns enemies and sends them to target locations. These special enemies then keep track of both when they die and when they move to new locations allowing the battle system to spawn new enemies safely.

### Defend: Helicopter

- Scripted helicopter to fly in and settle in front of player.
- Set up entity locations for the helicopter to fire at.
- Helicopter scripted to fire missiles and bursts of machine gun fire.
- After one sequence of machine gun fire the Helicopter's attacks become more deadly.
- Tuned helicopter health to match mini-gun damage rate.
- Allies give supporting dialogue to announce the helicopter and to tell the player to attack it.

### Defend Tank

- At the beginning of this sequence Price calls in for air support and is told that it will take some time.
- Once the tank arrives, Griggs is scripted to give reactionary dialogue.
- At the last second the AC130 arrives and destroys the tank.
- AC130 fire function created using the RPG bullet type along with scripted coordinate offsets.

### Evacuation: Exit Building

- Price and Griggs are scripted to wait for the player to turn around and look at them before opening the door and exiting.
- Created generic spawn manager that continuously creates guy until the player moves forward. This small system is used throughout the rest of the map to both stop spawning and start new spawning according to player movement.

### Evacuation: Road to Friendly Helicopter

- Used CoD4 scripted color based AI management system to move allies towards the level exit as the player moves.
- Scripted ally helicopter to fly over head as the player travels up the road, drawing the player towards the exit.
- Snipers scripted to hop back over the fence and follow team to the exit.