



BUNGiE®

DESTINY®



THE ART OF FIRST PERSON ANIMATION

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GAME CREDITS AT BUNGIE.

- HALO REACH
- DESTINY

WHAT MAKES A BUNGIE GAME FEEL LIKE A BUNGIE GAME?

CHAPTERS

1. Supporting the Goals of Sandbox Design
2. Making First Person content that feels “good”.
3. How to keep from killing yourself in the process.

WHAT IS FIRST PERSON ANIMATION?

First person animation is the movement of your avatar from your perspective as a player (including the players camera motion).

SUPPORTING THE GOALS OF SANDBOX DESIGN



THE DESIGN PILLARS OF FIRST PERSON ANIMATION

1. Immediate feedback from player controller input
2. Preservation of motion between actions
3. Player should have visceral satiation from your animation
4. Motion should serve to ground the player to the world
5. No speed bumps. Don't take control away from the player or slow him down

SUPPORT FAST, FUN, AND RESPONSIVE GAMEPLAY



MAKE IT FEEL LIKE YOUR BODY IS BEHIND THE CAMERA



HOW TO MAKE FIRST PERSON CONTENT THAT “FEELS GOOD”

No First Person Character



BUNGIE'S PLAYER CHARACTER

3rd Person Player

1st Person Player



Your Playable Character!



1st Person

3rd Person

Bungie's Screen Space





CRITICAL!
Hive Knight

10

CRITICAL!



16

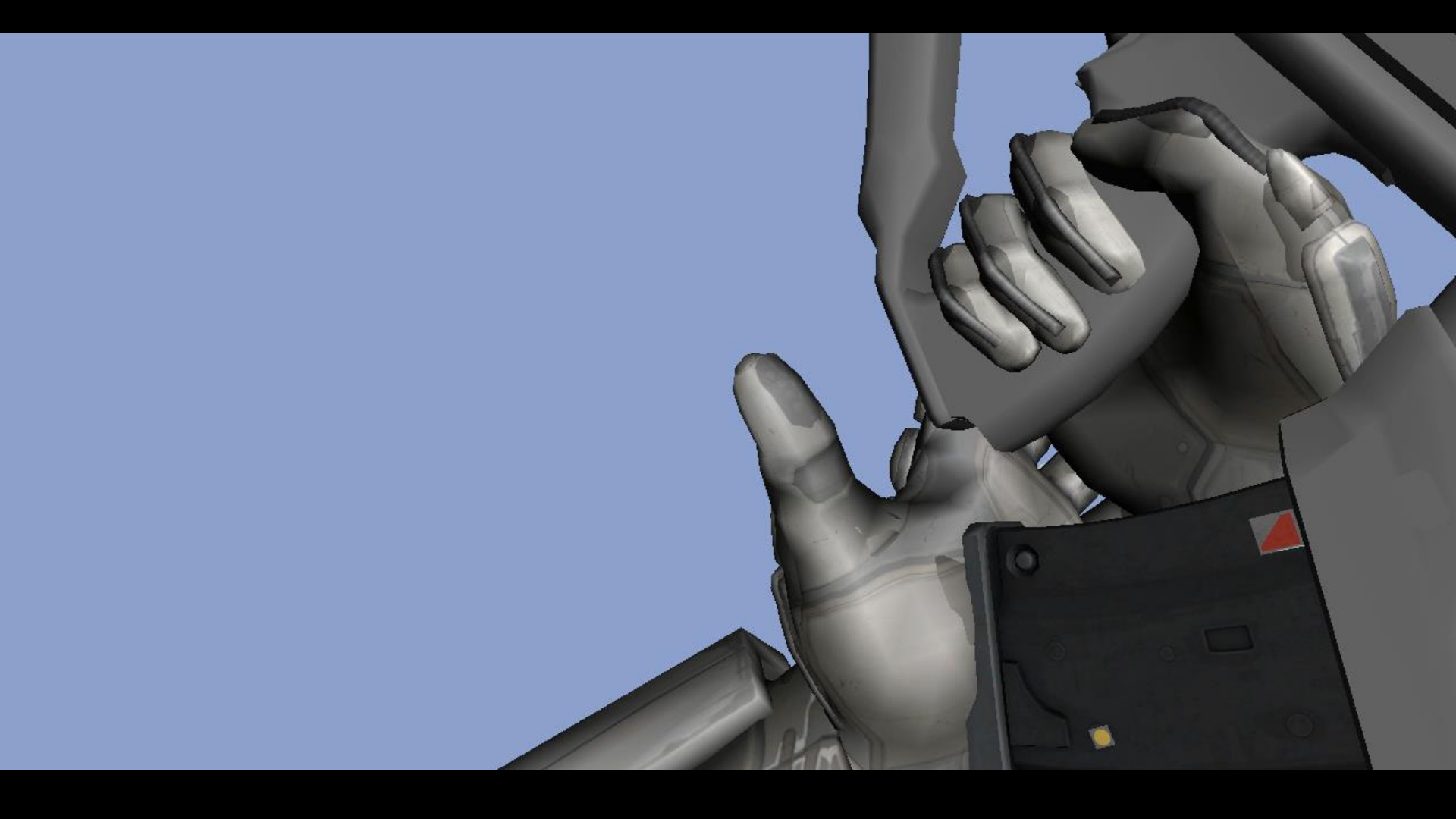
237

22

3

016

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ADDING OVERLAYS

Base Animations Only



26 ∞

PLAYER DATA WE CAN USE FOR FIRST PERSON

LOOK POSES



JUMP OVERLAY ANIMATION



LAND OVERLAY ANIMATIONS



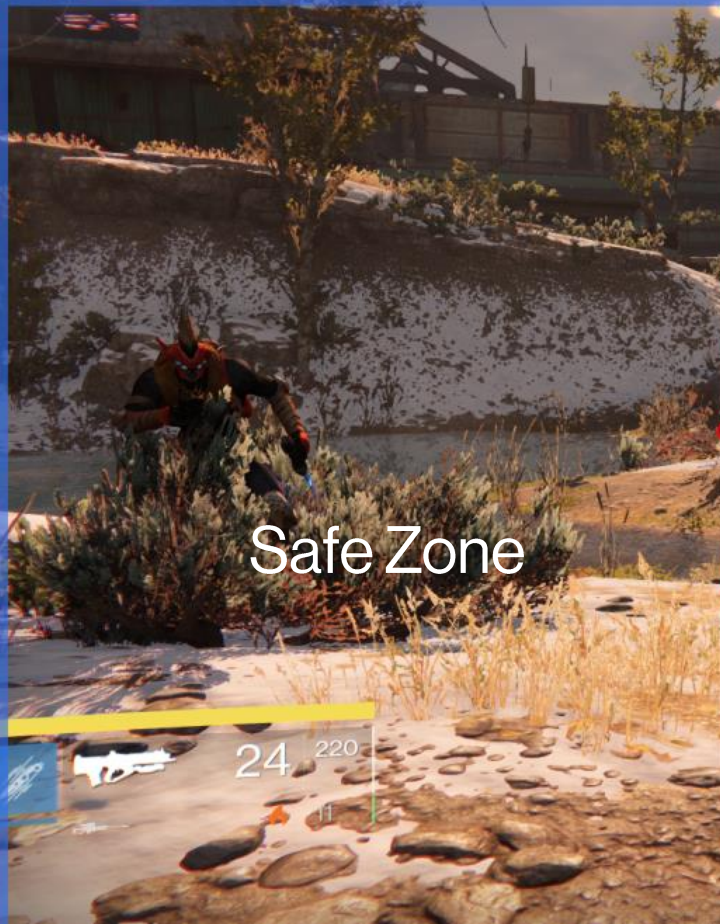
Base Animations Only



Base Animations + Overlays



POSING IN FIRST PERSON



Safe Zone



The Combat Corridor

2 Vandal



Safe Zone

Perip



11 Fallen Devil Walker
KOPHOS-BNG

20 roland-510

20 doyle-610

5 oryx-bng



9

BUNGIE

DESTINY



12 101

22



1

3



266



19





1

3

266



19



1

3



266



19



ANIMATING THE KNIFE MELEE

KNIFE MELEE KEY POSES

IDLE POSE

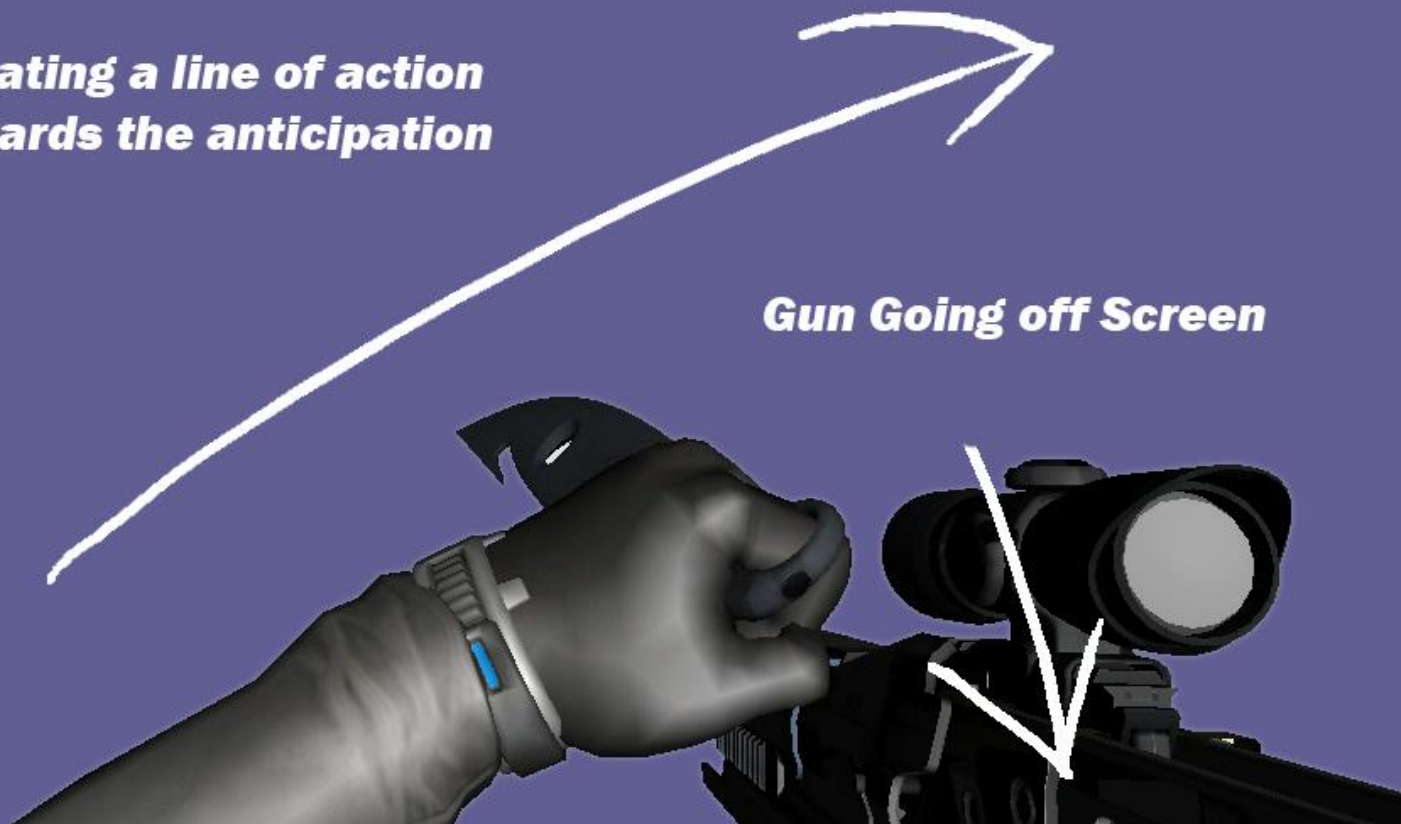
Don't Start Here



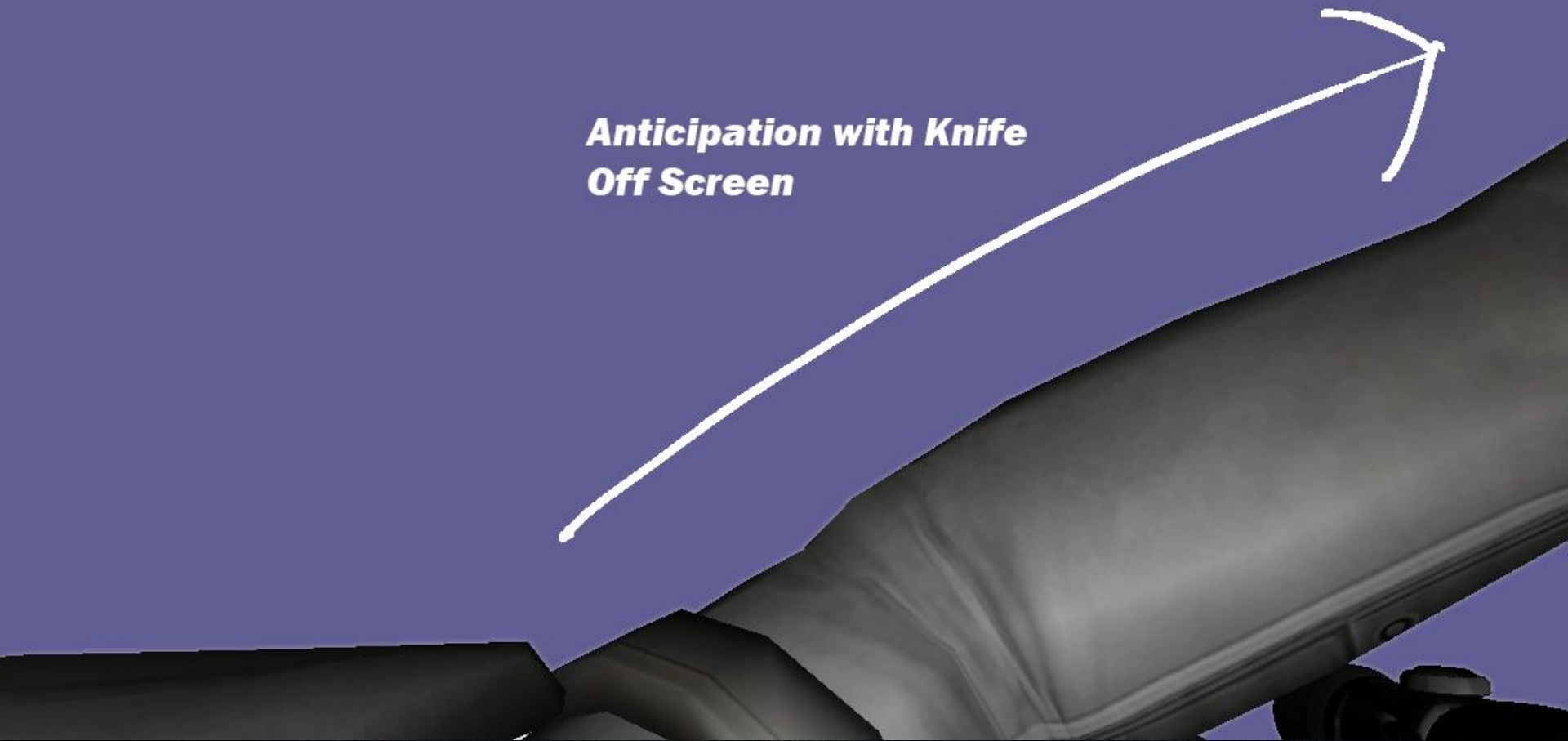
FRAME 1 - STARTING POSE

***Creating a line of action
towards the anticipation***

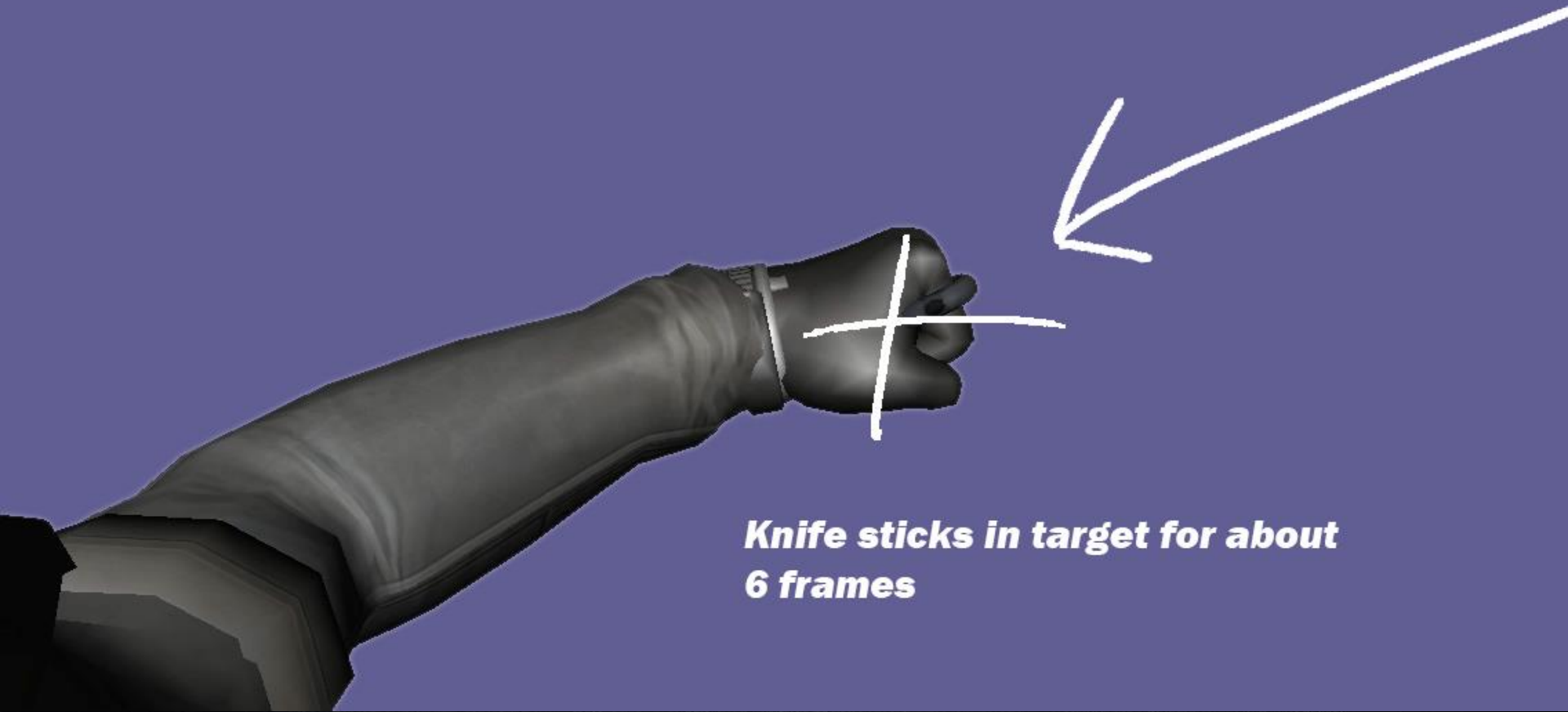
Gun Going off Screen



***Anticipation with Knife
Off Screen***



FRAME 5 – HIT POSE



***Knife sticks in target for about
6 frames***

***Pull free takes 5 frames
including overshoot***

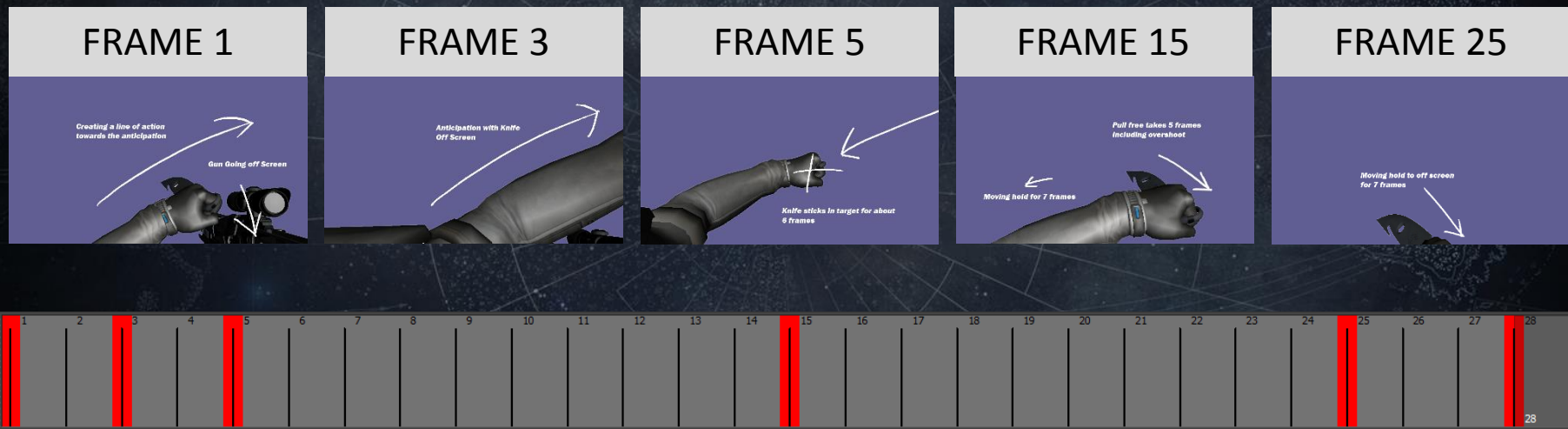
Moving hold for 7 frames



***Moving hold to off screen
for 7 frames***

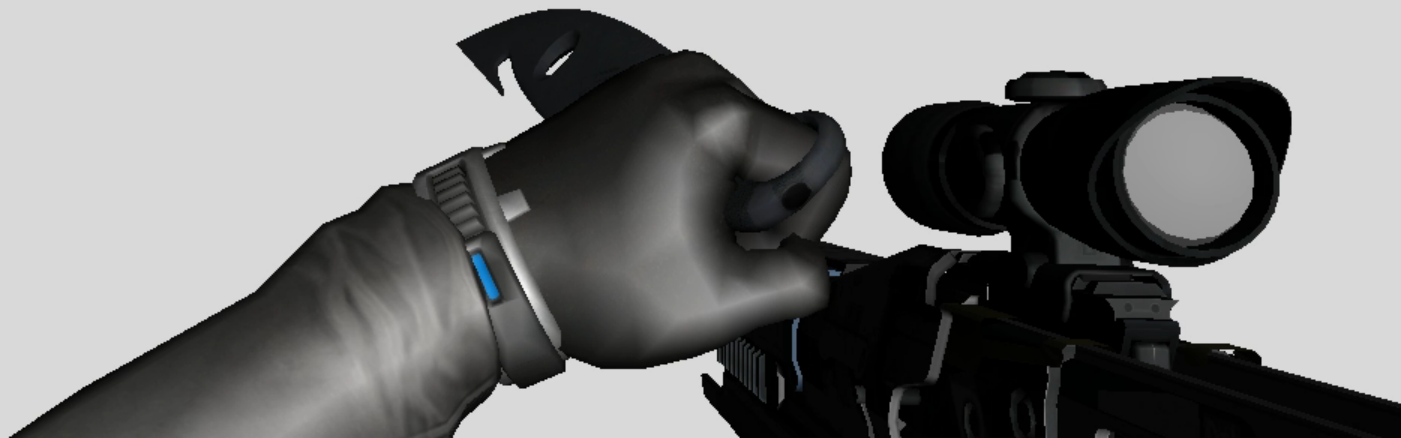


KNIFE MELEE TIMING

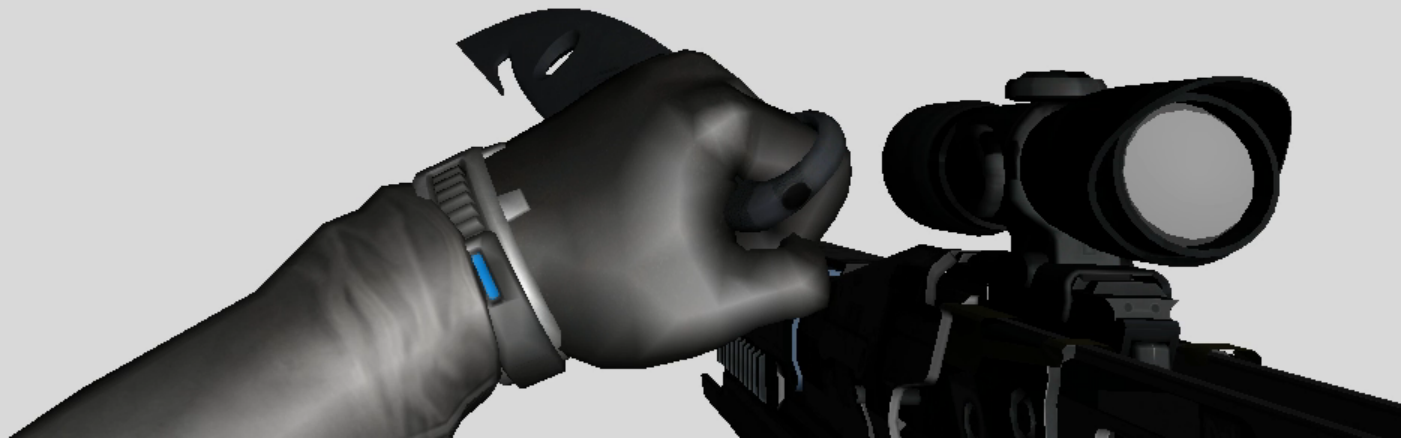


Melee Length = 28 frames

BLOCKING ANIMATION



POLISHED ANIMATION



THE PLAYER CAMERA

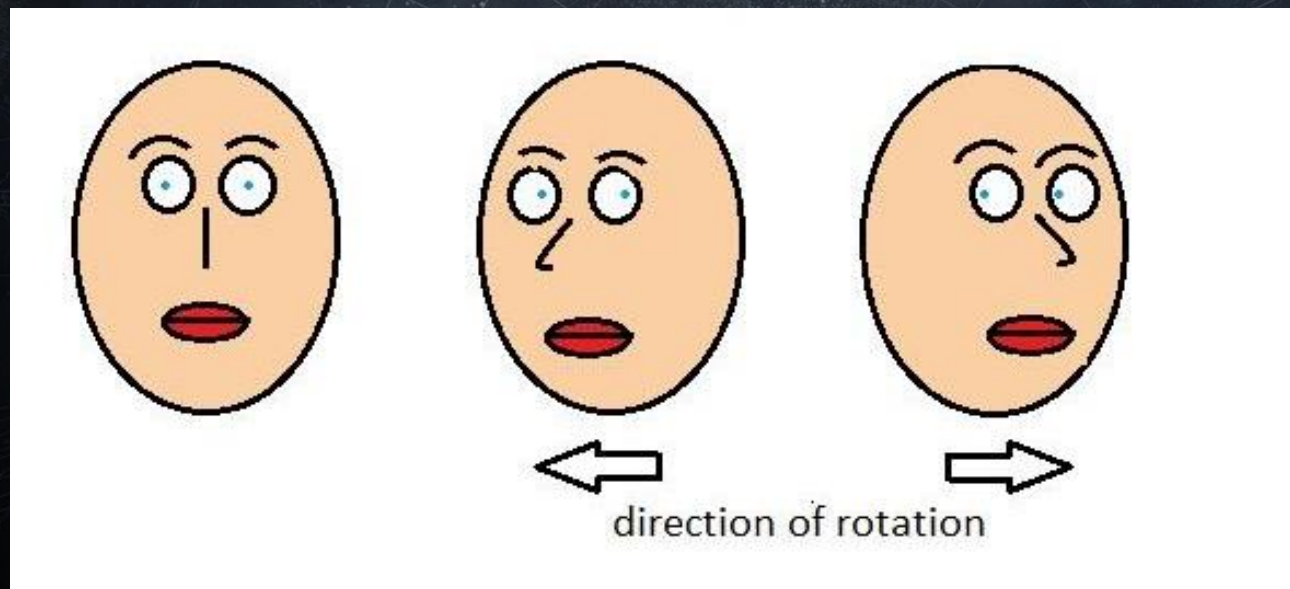
no stabilisation

HEAD MOUNTED CAMERA

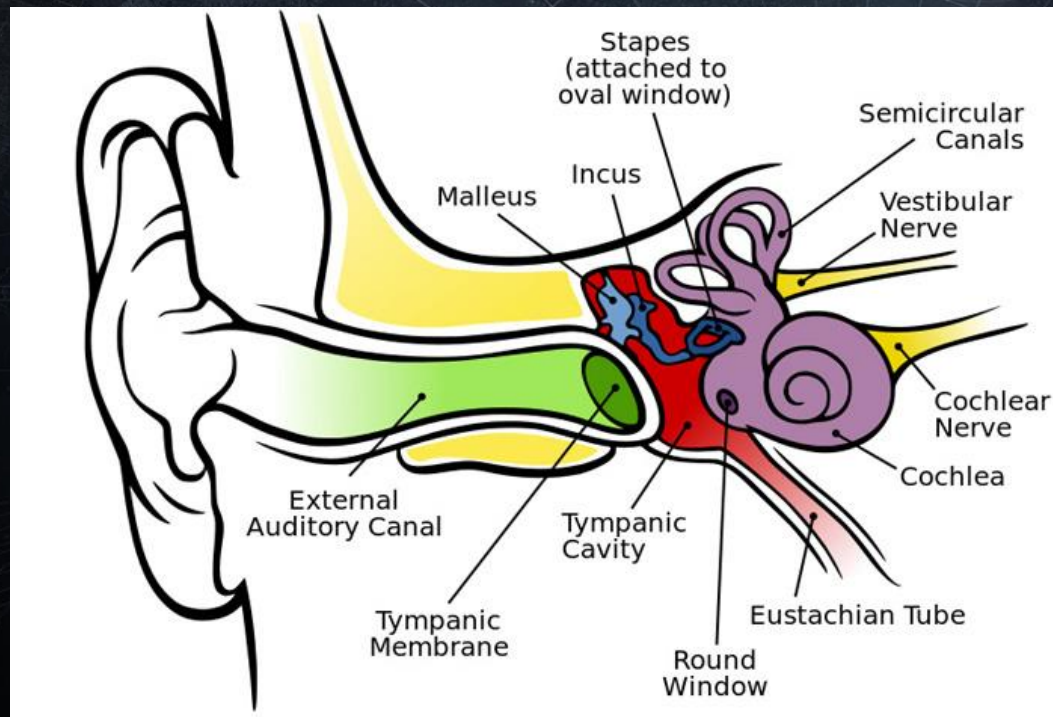


3840x2160
12,5f

VESTIBULAR OCULAR REFLEX

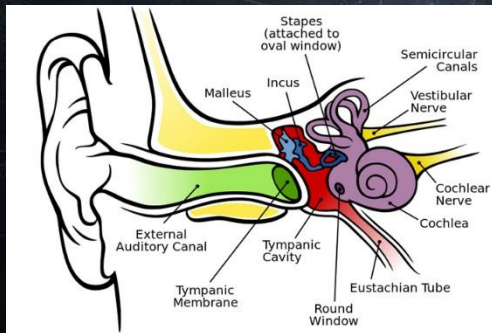


THE INNER EAR

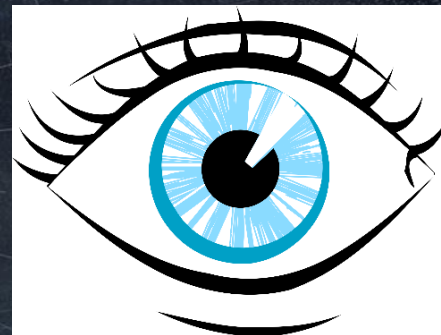




BALANCE = ALIGNMENT

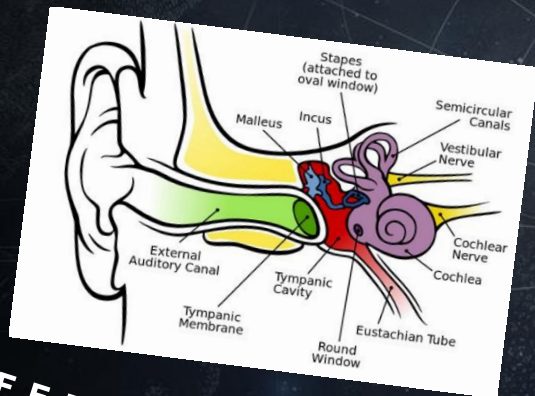


FEELING MOTION



SEEING MOTION

MOTION SICKNESS = MISALIGNMENT

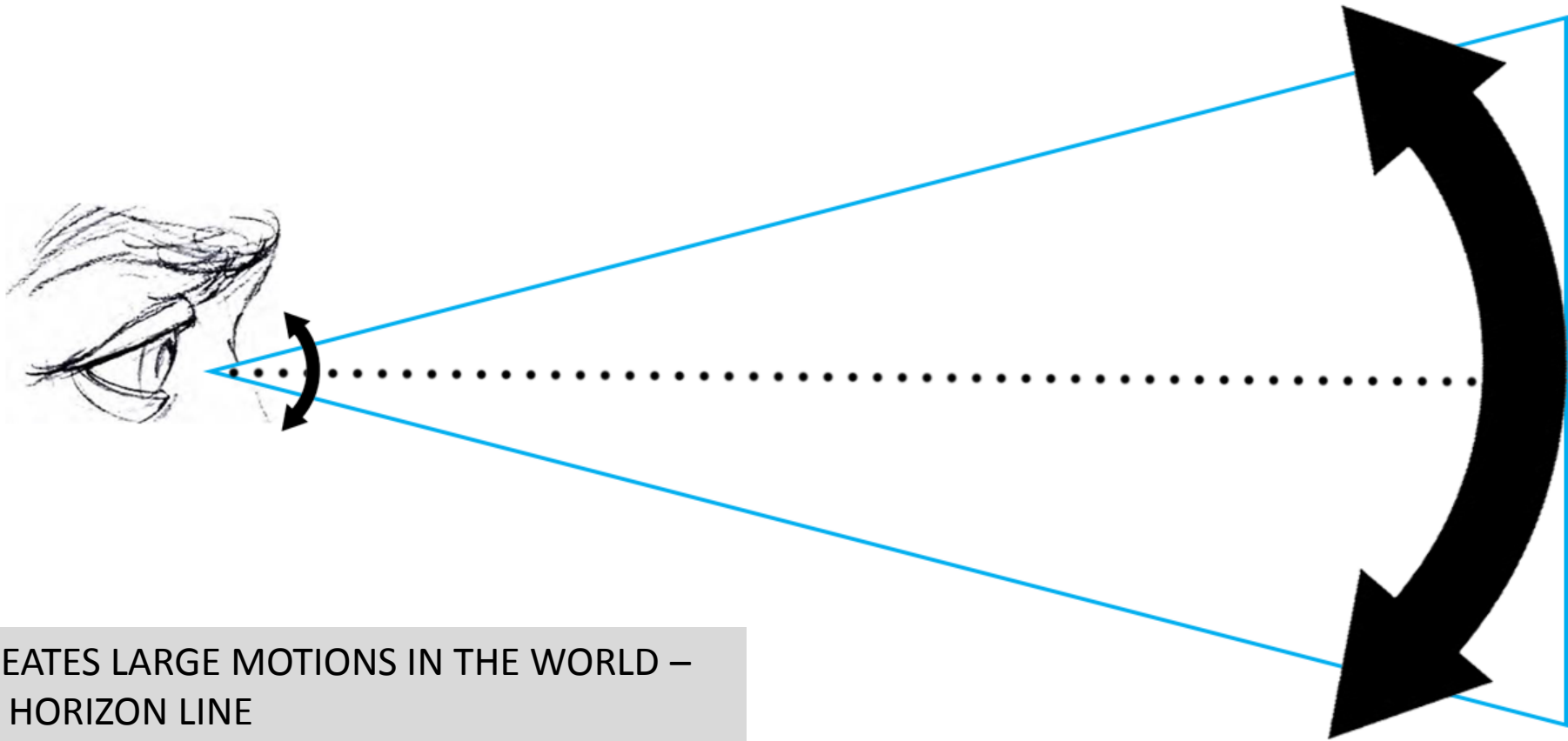


FEELING MOTION



SEEING MOTION

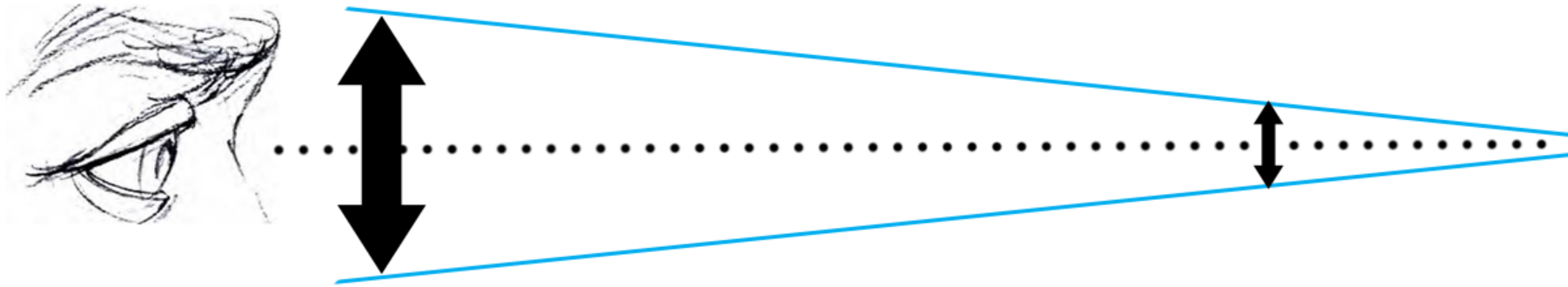
CAMERA ROTATION



CREATES LARGE MOTIONS IN THE WORLD –

- HORIZON LINE
- OBJECTS FAR AWAY FROM THE PLAYER

CAMERA TRANSLATION



CREATES LARGE MOTIONS UP CLOSE –

- OTHER PLAYERS, NPC'S AND COMBATANTS
- OBJECTS CLOSE TO THE PLAYER

THE HEAD LEADS THE ACTION



HEAD ANTICIPATES LEFT



HEAD LEADS THE ACTION
RIGHT



HEAD DIRECTION
REVERSES

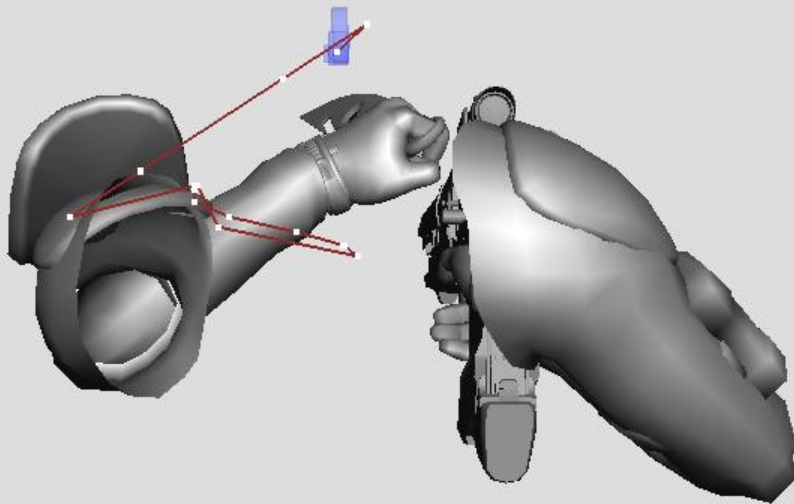


HEAD MOTION DISAPATES
AS BODY REGAINS
BALANCE

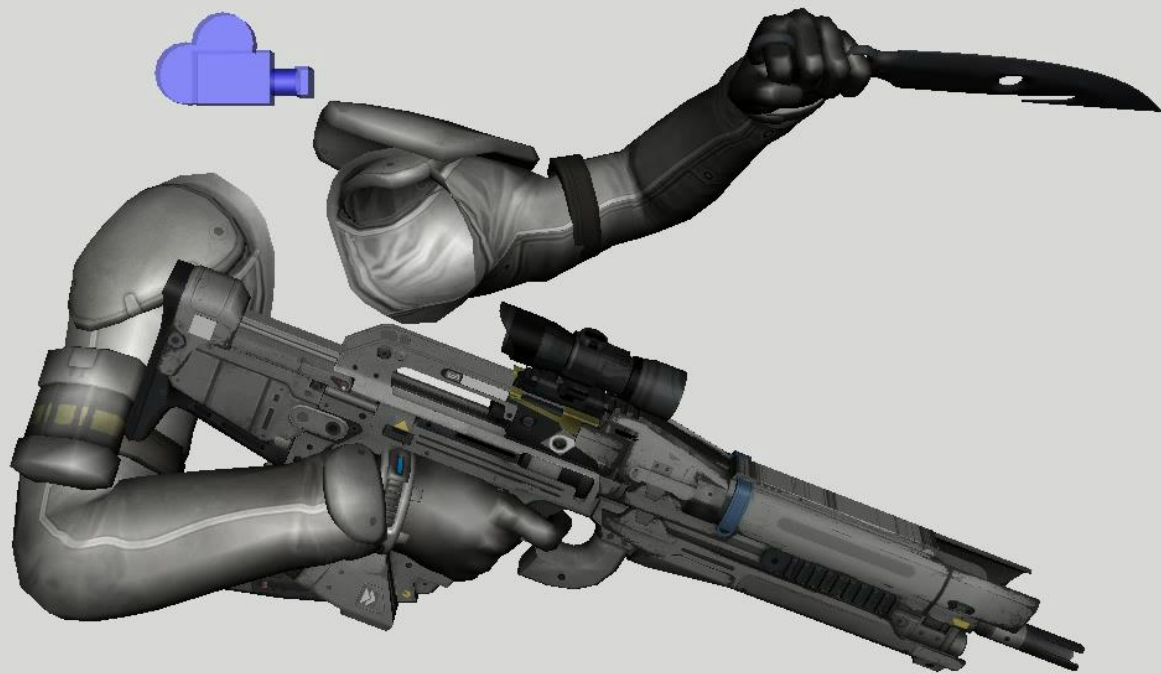




CAMERA ANIMATION PATH

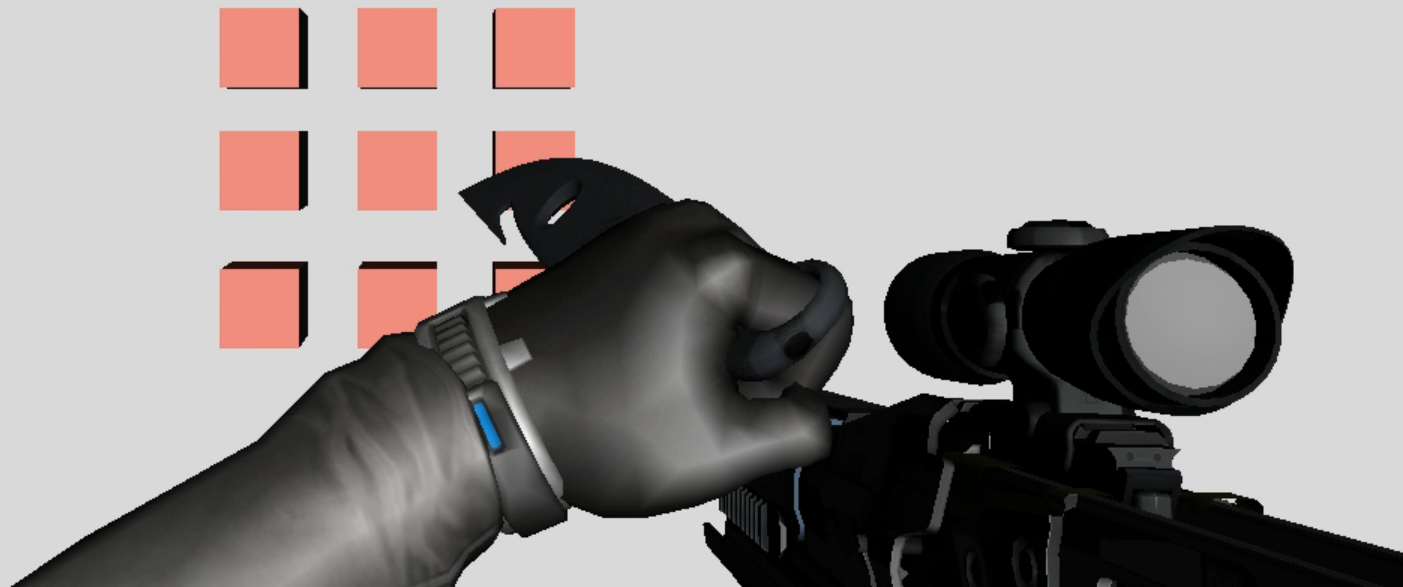


CAMERA ANIMATION IN SLOW MOTION



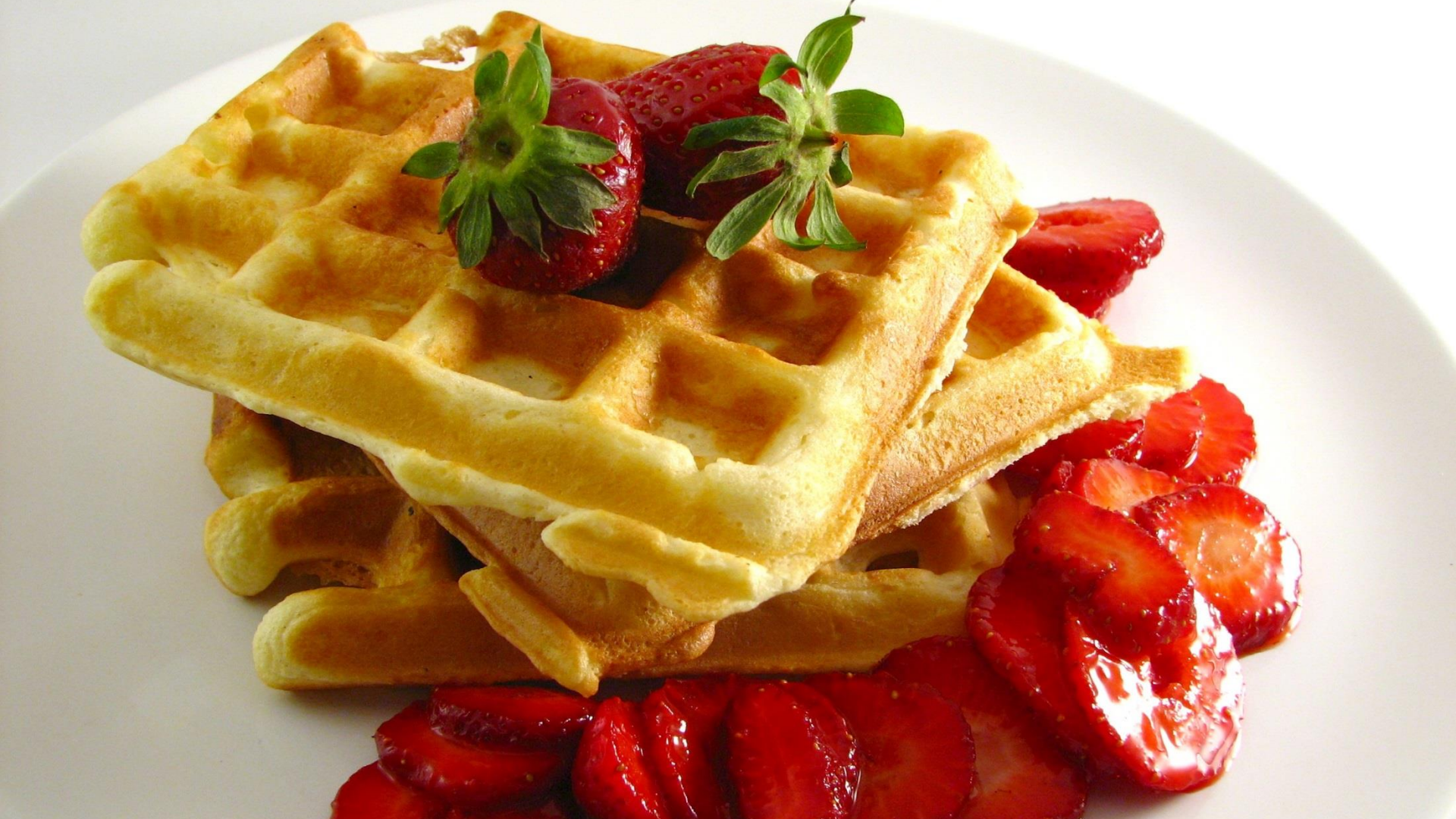
2

CAMERA ANIMATION IN FP



Key Poses

HOW TO KEEP FROM KILLING YOURSELF IN THE PROCESS



AGNOSTIC ANIMATION

Rocket Launcher Animation Set

Agnostic Grenade Throw Animation

Authored on the Base Rifle



Rocket Launcher Ready Animation



1

3



266



19

Complete Grenade throw with weapon Ready



UI Panel:

- Health Bar: Yellow bar at the top.
- Icons: Two blue square icons on the left, one showing a building and the other a shield.
- Weapon Icon: A white icon of a handgun.
- Numbers: A large white '1' and a smaller '3' next to it.
- Score/Stats: '266' and '19' with a blue star icon.

ANIMATION SCALING

FOV AND DEVELOPMENT

WORLD CAMERA FOV = 72

2 Vandal

24 220



FP ARMS AND WEAPON FOV = 77





CONCLUSION

- Design Principles
- Idle and overlay animations
- Posing
- Animating the Knife
- First person camera
- How to keep from killing yourself

*Details
matter, it's
worth waiting
to get it right.*

W E ' R E H I R I N G



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