

# Game Design Document (GDD)

**Project Name:** Pocket Pilot (Working Title)

**Genre:** Casual / Mixed Reality / Flight Action

**Target Platform:** Meta Quest 3 / 3S (Passthrough Required)

**Competition Category:** Best Casual Game + Hand Interactions

## 1. The Elevator Pitch

"Room Scale Ace" turns your living room into a stunt course. Reclaiming the childhood nostalgia of pretending your hand is a plane, players physically run, duck, and weave through their own furniture to collect coins and enter portals. No joysticks, no complex buttons—just your hand, a slingshot, and the open air of your living room.

## 2. Core Gameplay Loop

1. **Launch:** Pull back the virtual slingshot on your wrist to launch the plane.
2. **Fly:** Use direct hand-tilts to steer the plane through the physical room (Passthrough).
3. **Collect:** Gather procedurally placed coins around real-world obstacles (tables/chairs).
4. **Exit:** Fly into the "Rift Portal" to finish the level before fuel (time) runs out.

## 3. The Control Scheme (The "Free Flight" System)

- **The Pilot (Right Hand):** The plane is a "magnetic extension" of the hand.
  - **Roll:** Tilt palm Left/Right (Banks the plane + Coordinated Turn).
  - **Pitch:** Tilt fingers Up/Down (Nose Up/Down).
  - **Throttle:** Automatic Cruise (Constant speed).
  - **Boost:** Punch forward gesture (Short speed burst).
- **The Clutch (Fatigue Management):**
  - **Action:** Make a Fist.
  - **Result:** "Loiter Mode." The plane ignores input and circles in place. Used to rest the arm or reposition the body without crashing.
- **Safety Net:** If hand tracking is lost, the plane automatically enters Loiter Mode.

#### **4. Level Design Strategy (Procedural/MRUK)**

Levels are not hard-coded scenes; they are rules sets applied to the user's room using Meta XR Scene SDK.

- **The Floor Deck:** Coins spawn under tables/chairs (forcing crouching).
- **The Ceiling Run:** Coins spawn high up (forcing reaching).
- **The Slalom:** Coins spawn in a curve around the main open space.

#### **5. Scoring System**

- **3 Stars:** All Coins collected + Finished within "Target Time" (calculated based on room volume).
- **2 Stars:** All Coins collected (Any time).
- **1 Star:** Level finished (Portal entered) but missed coins.