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TAKE IT TO THE GRAVE/IF YOU KNOW YOU KNOW // KEEP THIS IN THE FAMILY

HEADQUARTERS

STRATEGIC EXERCISE DIRECTIVE

TITLE: OPERATION BACKROOM BOYS I

DATE: OCTOBER 15, 1955

TO: ALL ASSIGNED PERSONNEL

FROM: LT. COL. J. J. BOYCE, STRATEGIC PLANNING DIVISION

I. OBJECTIVE:

The Objective of this mission is to develop a new weapons system to establish superiority on land, air, or sea. Your mission is to develop digital models of potential military assets from the period in 1955 using OpenRA's mod framework. These assets will be utilized for TAKE IT TO THE GRAVE war-gaming scenarios to determine optimal strategic and tactical deployment methods. All modifications must be functionally accurate within the engine's limitations and provide a realistic battlefield comparison.

The Cold War arms race has reached a pivotal moment. The time has come not only to evaluate existing technology but to propose new advancements in weapon systems and platforms that could feasibly exist in 1955. Intelligence indicates that both NATO and Soviet blocs are aggressively pursuing technological innovations to bolster deterrence and enhance defense. Your directive is to conceptualize, design, and develop a new weapons system or platform utilizing the latest military advancements. This war-gaming initiative will determine which theoretical advancements provide the most strategic advantages.

II. BACKGROUND:

As of 1955, the rapid evolution of military technology has introduced new possibilities for battlefield supremacy. Recent breakthroughs in aerodynamics, guided missile technology, nuclear weapon delivery, armor, naval warfare, and battlefield automation have created opportunities for the next generation of strategic deterrents and force multipliers.

However, due to extensive espionage efforts, both sides have access to certain enemy technologies, enabling cross-adoption of concepts. Participants will be assigned either NATO or Soviet-aligned designs but may integrate applicable opposing developments where plausible.

CLASSIFIED INTELLIGENCE: Emerging intelligence suggests that Soviet missile technology may be further along than publicly believed. Preliminary reports indicate the USSR is testing an improved infrared missile guidance system and considering heavier armor composites. Conversely, NATO is investing in early digital fire-control systems and long-range strategic bombers capable of delivering miniaturized nuclear payloads. These developments are highly sensitive and should be factored into consideration for design.

III. TASKS AND PARAMETERS:

Each participant must propose and create a **new weapons system or platform** grounded in historical plausibility, ensuring balance between feasibility and innovation.

Your task is to:

- 1. Develop a conceptual design for a new tank, aircraft, submarine, missile system, or battlefield automation.
- 2. Create a functional in-game model utilizing OpenRA mod tools.
- 3. Justify the technology and its parameters with historical evidence and plausible development rationale.
- 4. Incorporate espionage considerations where applicable (i.e., borrowing tech insights from opposing factions).

IV. DELIVERABLES

- 1. Develop two .shp files and place them in the bits directory (1 for animations, 1 for icon).
- 2. Develop a .yaml file in the sequences directory to define animations.
- 3. Develop a .yaml file in the rules directory to define unit behavior and statistics.
- 4. Updated mod.yaml if necessary to integrate new unit definitions.

TECHNOLOGIES TO CONSIDER

- 1. Aerodynamics & Aircraft Design
 - Swept Wings (Increased speed and maneuverability)
 - Afterburners (Boosting thrust for supersonic flight)
 - Radar-Guided Air Interception (Beyond-visual-range engagements)

- 2. Guided Missile Technology
 - Infrared and Radar-Guided Air-to-Air Missiles
 - Surface-to-Air Missile Systems (SAMs for defensive networks)
- 3. Nuclear Weapons and Delivery Systems
 - Miniaturization of Nuclear Warheads
 - Jet-Powered Strategic Bombers
- 4. Armor and Land Warfare
 - Laminate and Composite Armor
 - Smoothbore Tank Guns for Higher Velocity Rounds
- 5. Naval Warfare Innovations
 - Nuclear Propulsion for Submarines
 - Autoloading Naval Guns for Increased Fire Rate
- 6. Electronics and Warfare Automation
 - Early Digital Fire-Control Systems
 - Tactical Battlefield Computers for Command Networks
- 7. Helicopter Warfare
 - Tactical Helicopters for Rapid Deployment
- V. FILE STANDARDS
 - 1. Must follow proposedname.shp for sequences and proposednameicon.shp for icons.
 - a. Examples
 - i. ragnar.shp
 - ii. ragnaricon.shp
 - 2. Must use proposedname with comments student name and short description for
 - a. Example: RAGNAR #an airplane that can carry a ship and land on water
 - 3. Must comment historical justifications for game-trait parameters
 - a. #ship can land on inland lakes and deliver river craft to which cities have little defense.

VI. Steps:

- 1. Concept Design & Research
 - Identify a technological focus based on available 1955 advancements.

- Draft concept specifications (speed, range, firepower, cost, etc.).
- Determine how it integrates into existing strategies.
- 2. Sprite Creation (Using Blender & Open Source Shape Builder)
 - Design model animations and icons for selected unit.
 - Export sprite sheets in .shp format.
 - Save two animation .shp files and two icon .shp files in the bits directory.
- 3. Defining Sprites in OpenRA (Sequences Directory)
 - Create a .yaml file in sequences directory.
 - Define how the engine interprets the sprite sequences (idle, moving, firing animations, etc.).
 - Include descriptive # comments explaining frame timing and sequence structure.
- 4. Implementing Unit Behavior (Rules Directory)
 - Develop a .yaml file in rules directory to establish unit attributes (speed, firepower, health, etc.).
 - Assign appropriate traits such as Armament, Armor, Speed, and BuildCost.
 - Ensure values match historical data.
 - Document all attributes with # comments for transparency.
 - The first line of each .yaml file must include a # URL source for research justification.
- 5. Integration and Testing
 - Modify mod.yaml if necessary to include new unit definitions.
 - Compile and launch OpenRA to verify correct sprite behavior and game integration.
 - Adjust any balancing issues through parameter tweaks.

VI. Time Allocations:

Session 1: Modify appropriate files and use the "make" command to compile them into a working mod.

Session 2: Test game play to determine an appropriate balance of numbers and effective tactics (debug mode).

Simulation: All newly developed technologies will be added to CodeWar1955 and teams will play vs one another.

VII. EVALUATION METRICS:

- 1. Code Integrity: YAML files must compile without errors and adhere to OpenRA syntax.
- 2. Innovation Feasibility: The proposed system must be technologically plausible in 1955.
- 3. Trait Balance: Unit statistics must reflect real-world constraints while ensuring fair gameplay mechanics.
- 4. Documentation & Justification: Every unit must have annotated justifications linking statistics to real-world sources.
- 5. Functionality in Simulated Combat: Units must perform as expected within OpenRA engagements.

VIII. SECURITY CLASSIFICATION:

Operation Backroom Boys II is a classified initiative aimed at conceptualizing next-generation Cold War military platforms. You are required to ensure absolute discretion regarding all findings and materials. Upon completion, all working assets will be incorporated into CodeWar1955 and submitted for strategic evaluation. This document and all associated materials are classified as TAKE IT TO THE GRAVE/IF YOU KNOW YOU KNOW // KEEP THIS IN THE FAMILY. Unauthorized dissemination is prohibited.

Your ability to propose game-changing systems will determine how the balance of power unfolds in this simulated battlefield. The Soviets are advancing. NATO is evolving. The future is uncertain—but this exercise will help shape it.

AUTHORIZED BY:

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