

Metaero Whitepaper - June 2025

Executive Summary

Metaero rewards Microsoft Flight Simulator pilots, ATC volunteers and creators with real on-chain value. Two tokens power the economy:

METAR (300 M cap) - governance, staking, DAO treasury

FLY (uncapped) - utility minted from verifiable in-game progress

A non-transferable Pilot NFT binds each wallet to an Xbox ID; pilots receive a 250 METAR airdrop upon minting and then claim FLY based on incremental skill progression.

1 | Introduction

Flight-sim enthusiasts invest hundreds of hours mastering real-world procedures, yet earn no tangible reward. Metaero bridges simulation with Web3, creating a player-owned, decentralized economy governed by its own DAO.

2 | Architecture Overview

- PilotProfileNFTVoucher: One soul-bound ERC-721 per Xbox ID, voucher-based mint (pilot pays gas), triggers a 250 METAR airdrop.
- FLYMinterVoucher: Voucher-based FLY claims, fetches Delta-stats from NFT checkpoints, anti-cheat logic, adjustable emission multiplier.
- FLYToken: ERC-20 token, 2.5% fee to treasury, minting restricted.
- Backend Oracle: Fetches Xbox stats, signs vouchers to prevent replay.

3 | Official Reward Formula (v2)

Flight Hours = $(G \times 0.2504) + (A \times 2.2685) + (\ln(T + 1) \times 0.001002) + (P \times 0.08025) + B$

Where:

- G = Gamerscore
- A = Number of Achievements
- T = Time Played in minutes

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- P = Progress Percentage
- B = Bonus from Key Achievements (e.g. Century Club, Frequent Flyer)

Bonus Table (B):

- Century Club: +10
- Frequent Flyer Miles: +8
- Pilot World Traveler: +6
- Use the Weather Presets: +4
- Jack of All Planes: +4
- Instrument Instrumental: +3
- Mother Nature: +3
- Completionist: +5

Max bonus if all unlocked: 43

4 | Tokenomics

METAR (Fixed Supply - 300M):

- 40% Ecosystem Rewards
- 20% DAO Treasury
- 19% Core Team
- 10% Strategic Partners
- 6% Airdrops
- 5% Liquidity

FLY (Uncapped):

- Minted only via verified flight hours
- 2.5% transfer fee to DAO treasury

5 | Security & Anti-Cheat

- Activity gating: score/achievement/progress must increase
- On-chain checkpoints: prevent double minting
- Soul-bound NFTs: non-transferable

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- Tunable DAO parameters
- Minimum cap of 100 hours enforced when score > 100

6 | Roadmap 2025

Q2 2025:

- Pilot NFT minting
- Oracle backend live

Q3 2025:

- DEX listing (METAR)
- Fly staking/leaderboard

Q4 2025:

- DAO governance portal
- Marketplace beta (liveries/plugins)
- ATC rewards & ecosystem grants

7 | Integrations

- Navigraph (charts)
- Flightsim.to (mods)
- VATSIM/IVAO (virtual ATC)
- PACX, SLC, Volanta, SimConnect

8 | Contact

Website: <https://metaero.org>

Twitter: @flymetaero

Discord: flymetaero

Email: david@metaero.org