Sure, I can help create an assurance case for ACAS Xu using a hierarchical tree format. Here's an example of how it might be structured:

```

- Goal: ACAS Xu is safe and secure for operational use

- Strategy: Decompose safety and security argument by aspects

- Goal: ACAS Xu avoids mid-air collisions (Safety)

- Context: ACAS Xu operational environment

- Assumption: ACAS Xu receives accurate and timely data

- Strategy: Use of formal verification and validation methods

- Sub-goal: Mid-air collision avoidance algorithms are formally verified

- Evidence: Formal proof of algorithm correctness

- Evidence: Simulation results

- Sub-goal: System is validated in relevant operational scenarios

- Evidence: Test results from simulation environments

- Evidence: Flight test results

- Goal: ACAS Xu resists unauthorized access and tampering (Security)

- Context: Potential threat model for ACAS Xu

- Assumption: Adequate cryptographic measures are implemented

- Strategy: Decompose the security argument by components

- Sub-goal: Communication subsystem is secure

- Evidence: Security analysis of communication protocols

- Evidence: Results from penetration testing

- Sub-goal: Software integrity is maintained

- Evidence: Code signing and verification process

- Evidence: Results from static and dynamic code analysis

- Sub-goal: Hardware is tamper-resistant

- Evidence: Design assessment of tamper-resistance features

- Evidence: Results from physical security testing

```

This hierarchical structure aims to comprehensively cover the safety and security aspects of the ACAS Xu system, breaking down the primary goal into more manageable and specific sub-goals, each supported by corresponding evidence and context.