\*\*Assurance Security Case Hierarchy for ACAS Xu (Airborne Collision Avoidance System Xu)\*\*

```

G0: ACAS Xu satisfies security requirements

- C0: Description of ACAS Xu

- C1: SR are requirements about protecting the ACAS Xu from malicious entities

- J0: The argumentation is based on satisfaction of security requirements (SRs)

- A0: System SRS for ACAS Xu are complete, adequate, and consistent

- S0: Argue through asset protection and secure development requirements

-- G1: ACAS Xu satisfies the asset protection requirements

--- A1: Asset inventory for ACAS Xu is established

--- S1: Argue through the different stages of the ACAS Xu development life cycle

---- G3: Asset protection requirements are met during the architecture design phase of ACAS Xu

----- C2: Description of the ACAS Xu architecture

----- S2: Argue through derivating security threats from SRs

------ G5: ACAS Xu architecture is protected against identified security threats

------- A2: All relevant threats to ACAS Xu have been identified

------- S3: Argue over each security threat to ACAS Xu

-------- G0.X: ACAS Xu architecture is protected against {specific security threat X} (undeveloped)

------ G6: ACAS Xu architecture is validated (undeveloped)

------- C3: Description of ACAS Xu architecture model

------- A3: ACAS Xu architecture model is well defined in {specified formal method}

----- J1: Detection and mitigation of threats meet ACAS Xu's SRs

---- G4: Asset protection requirements are met during other phases of ACAS Xu (undeveloped)

-- G2: ACAS Xu satisfies secure development requirements (undeveloped)

```

In this structure, each goal, context, strategy, assumption, and justification starts with a dash (or multiple dashes for sub-elements), reflecting their level within the hierarchy. All instances and placeholders specific to the ACAS Xu system have been instantiated according to the provided pattern, focusing on ensuring alignment with security requirements and protecting the system's architecture from threats. Some goals have been marked as "undeveloped," indicating areas needing further elaboration or detail in future iterations of the security case development.