

## Phase 1:

Hazard Analysis &  
Test Specification

Domain Expert/  
sUAS Developer



Perform Hazard  
Analysis

1



Hazard  
Analysis

Perform Failure/Root  
Cause Analysis

8

2

Define Fuzz  
Specifications



Fuzz  
Specification

3

Specify Test  
Missions



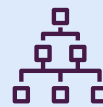
Test Mission  
Specification

- Flight Controller Modes
- Application States
- Input Event
- Environment
- Constraints

4

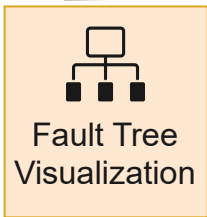
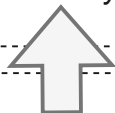
Create Test Oracle

Test Oracle:  
Decision  
Tree



## Phase 2:

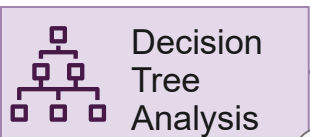
Test Execution &  
Root Cause Analysis



Fault Tree  
Visualization

7

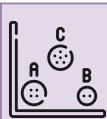
Generate  
minimal  
Fault Trees



Decision  
Tree  
Analysis

Failure Identification

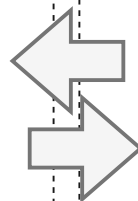
6



Result  
Clustering



Mission  
Execution  
Profile



Execution  
Storage

5 Execute Test Cases



Test Config.  
Generator  
(Fuzzer)

Execution Handler

Simulation Environment

SuT

Field Testing