

UTM Simulator

System Decomposition

Airspace structure
Access control
Preflight planning
Collision avoidance

Evaluate different UTM algorithms

Python 2D simulation

Output

2D trajectories of all the eVTOLs during the cruise segment of the mission profile

Dilation

Generate full mission profile

Add terminal area procedures in the front and end of 2D cruise segments
Add altitudes to the 2D cruise trajectories

Output

3D mission profile of each eVTOL

Performance Evaluation

SUAVE

Model an eVTOL
Execute a performance evaluation of the given mission profiles

Output

Throttle profiles
Battery Voltage profiles
Battery Energy profiles
C-Rating profiles