Overall Aircraft Model

Physical Aircraft – Scalar (same for all operating points)

Wing
- Area
- Chord
- Span
- Weight

Fuselage
- Length
- Radius
- Height
- Weight

Engine
- Fan areas
- Turbine areas
- Weight

Vertical Tail
- Area
- Chord
- Span
- Weight

Horizontal Tail
- Area
- Chord
- Span
- Weight

- Overall aircraft weight

Vectorized variables (different values for different operating points)

Cruise Segment 1

Top of Climb

Climb Segment 1
- Wing lift
- Engine thrust
- TSFC
- Total drag
- Tail downforce
- Fuel burn