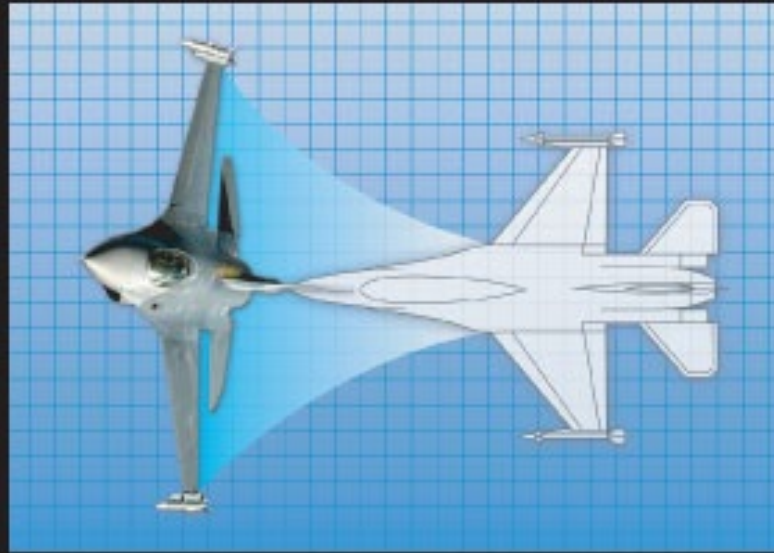
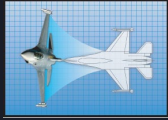
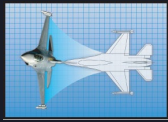


SimGen

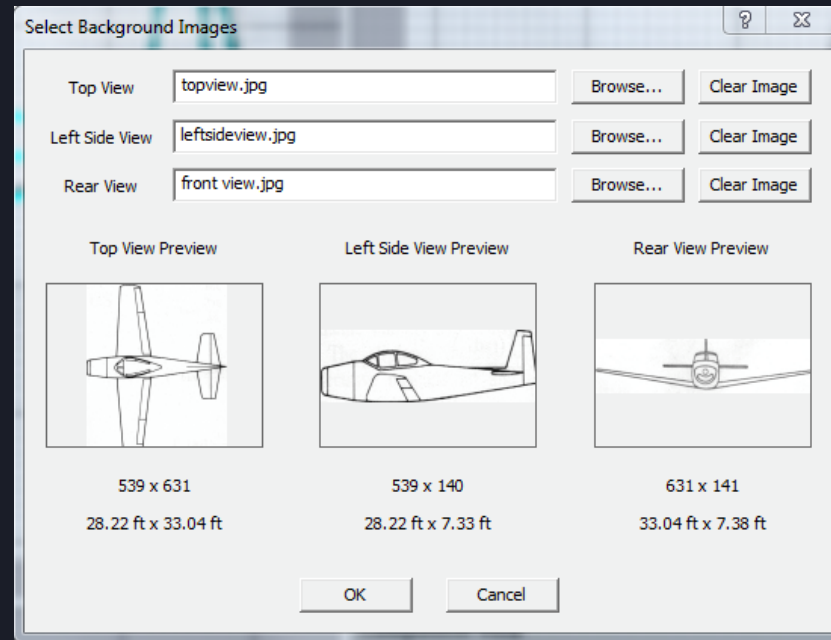
Flight Model Generation From a 3-View Drawing



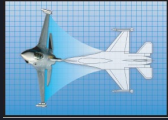
SimGen is an aerodynamic prediction tool for flight model development and conceptual design.



Generate Aero from 3-View Drawings

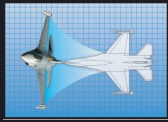


SimGen provides a Graphical User Interface (GUI) that enables the user to **quickly** generate an aerodynamic database from the 3-view drawings of an aircraft.

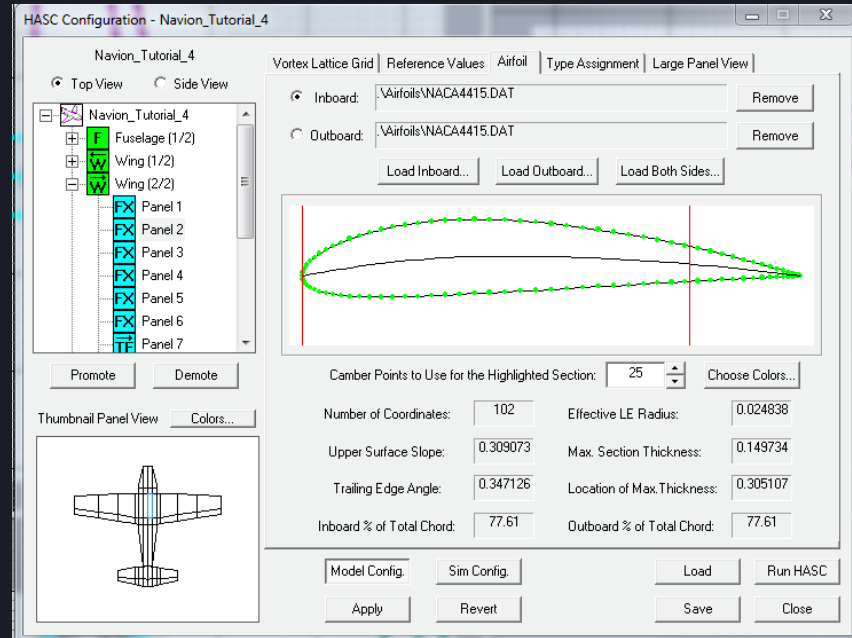
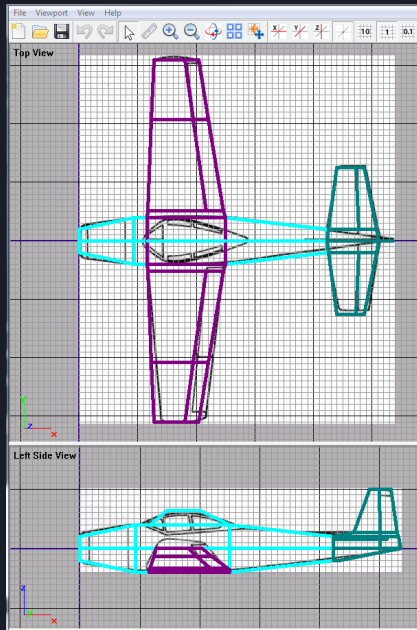


Common Uses for SimGen

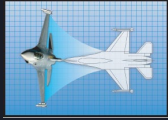
- o **Conduct configuration design studies** by easily performing aero and flight dynamics trade-offs.
- o **Generate predictive models** for direct simulation application in trainers, constructive force models, adversary models, and entertainment applications.
- o **Generate prototype vehicle aerodynamic database** as basis for further development or augmentation with supplemental data.
- o **Generate rapid predictions of configuration change effects** such as store addition or surface loss.



Rapid Configuration Analysis



With **SimGen**, users can quickly optimize a design by changing the aircraft geometry and instantly seeing the resulting change in aerodynamics.

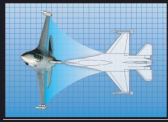


Computational Methods

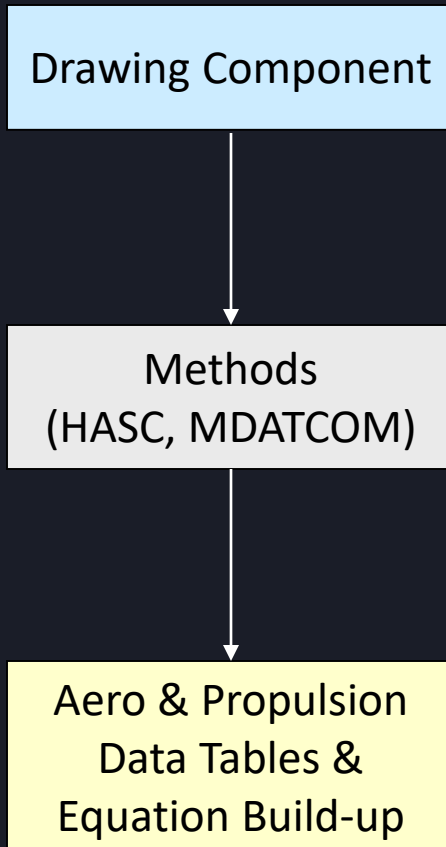
HASC

Missile
DATCOM

SimGen uses industry-validated **computational codes** to enable the quick computation of aerodynamic data for use in simulation flight models or design efforts.



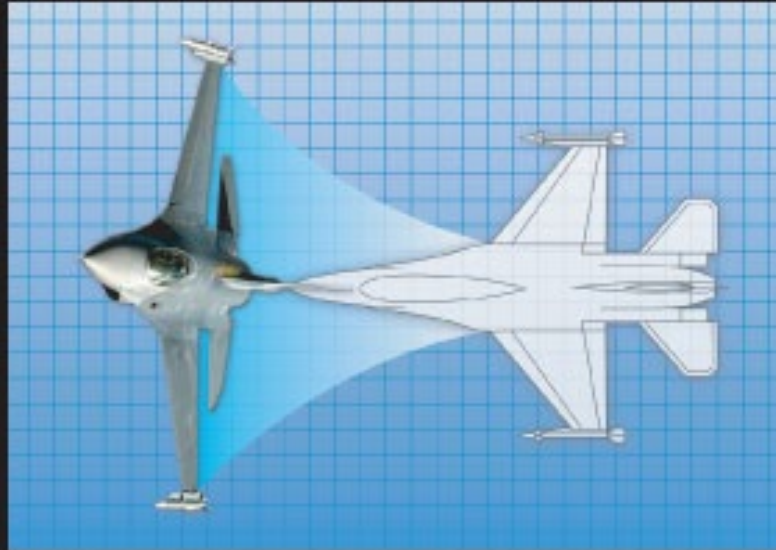
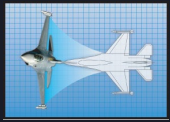
The SimGen Process



1. **Trace** the vehicle geometry

2. **Assign** airfoils, mass properties, etc.

3. **Specify** simulation extents (alpha, beta, controls, etc.) and **generate** output.



SimGen provides the ability to **rapidly assess the flying qualities** of aircraft configurations and **generate flight models** for simulation applications.