

Configuration Layout Addendum

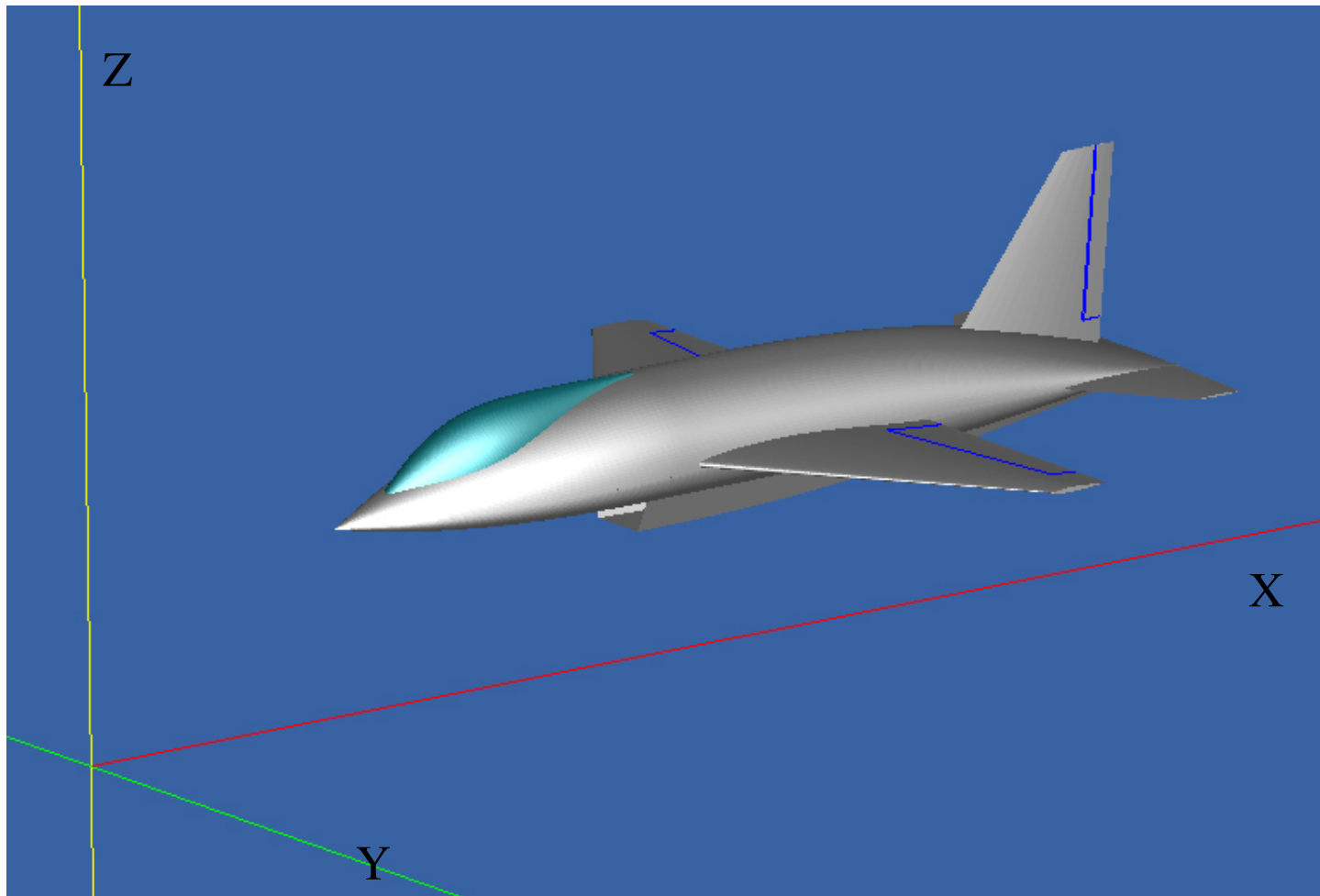
William Michael Butler

Sept. 17, 2009



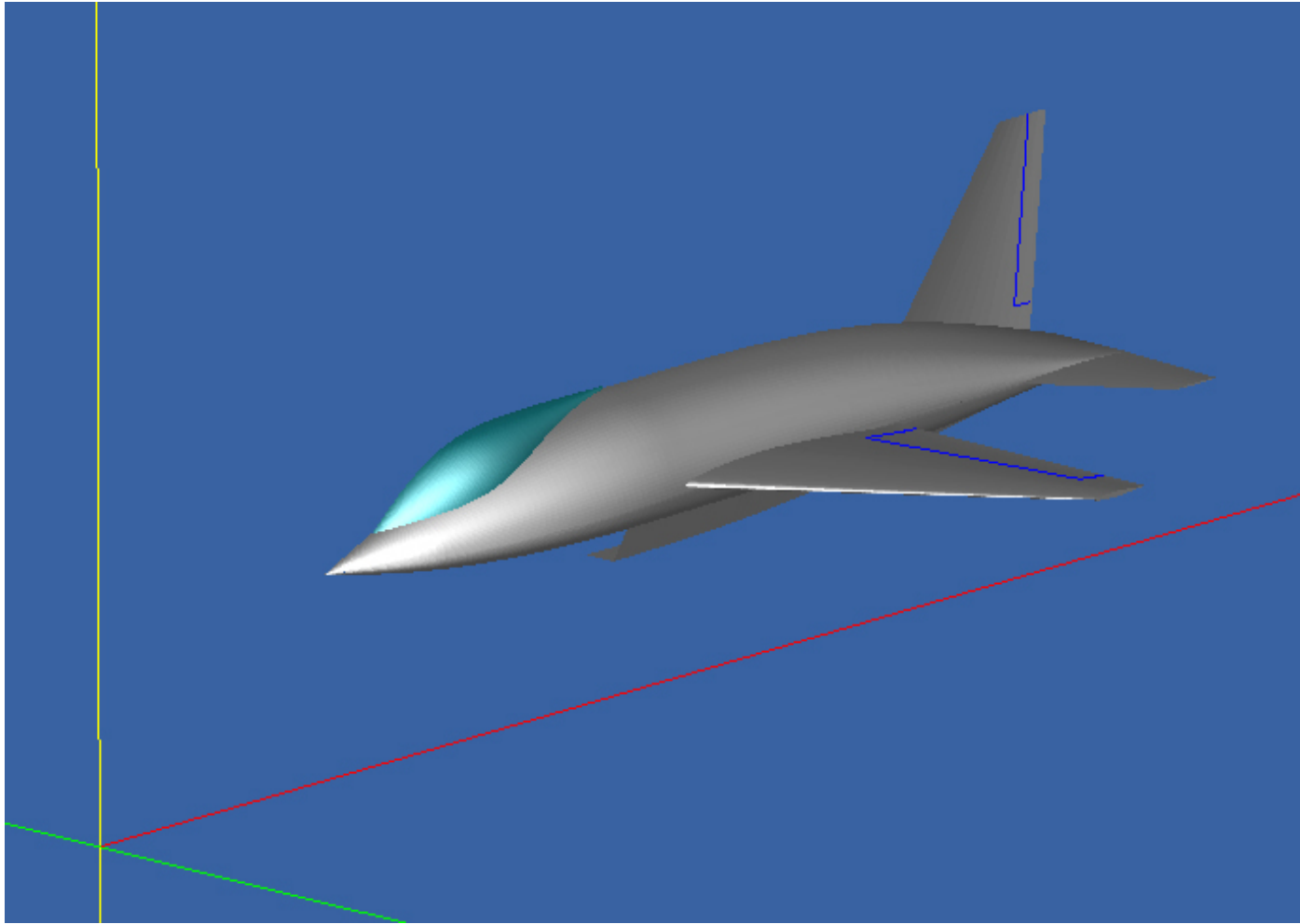
Aerospace and
Ocean Engineering

Aircraft CAD Model Conventions



Fuselage Station Planes are perpendicular to the X axis
Butt Line Planes are perpendicular to the Y axis
Water Line Planes are perpendicular to the Z axis

Aircraft CAD Model Conventions

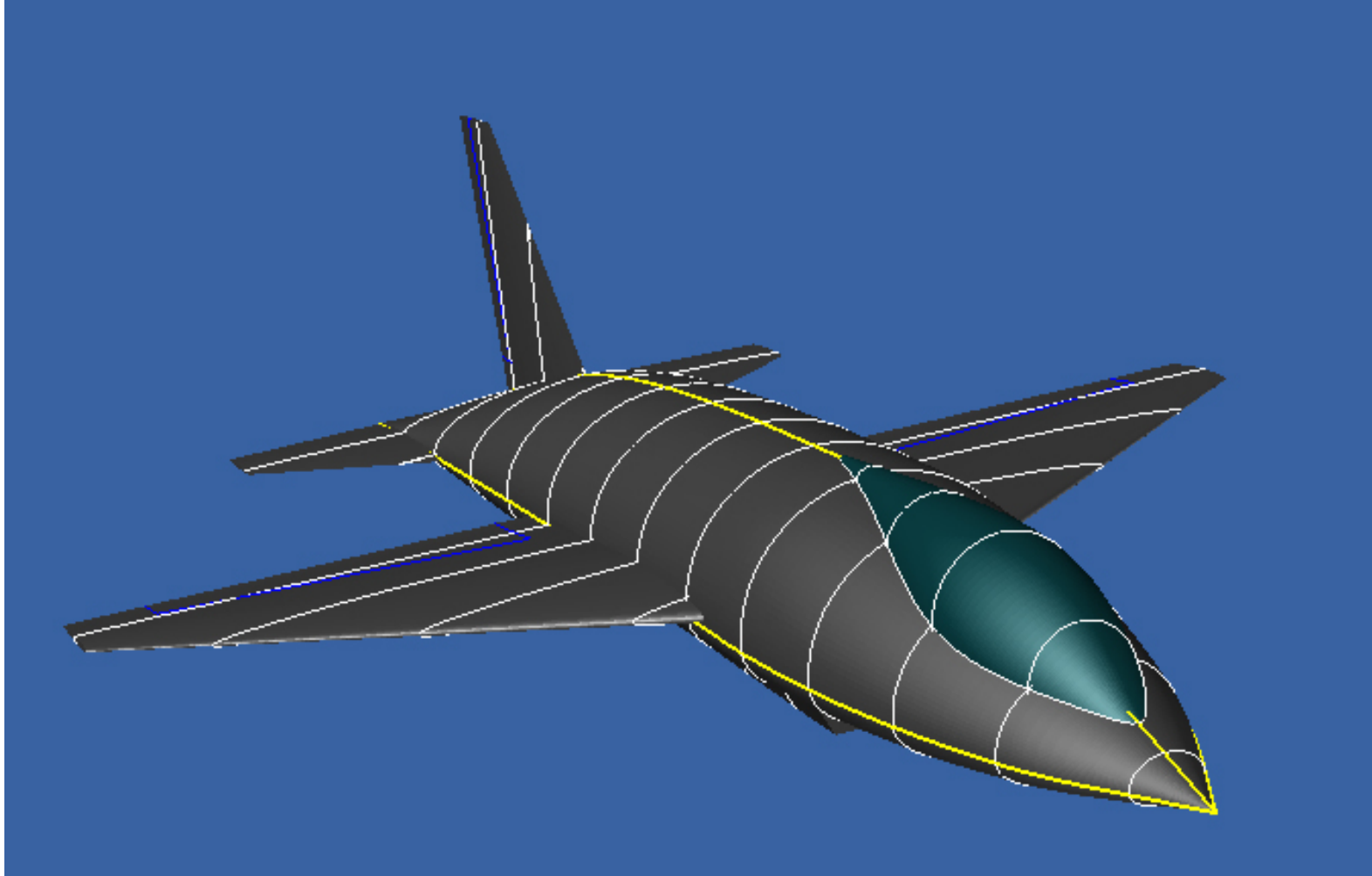


Often, half of the aircraft model is created in the early stages of design



Aerospace and
Ocean Engineering

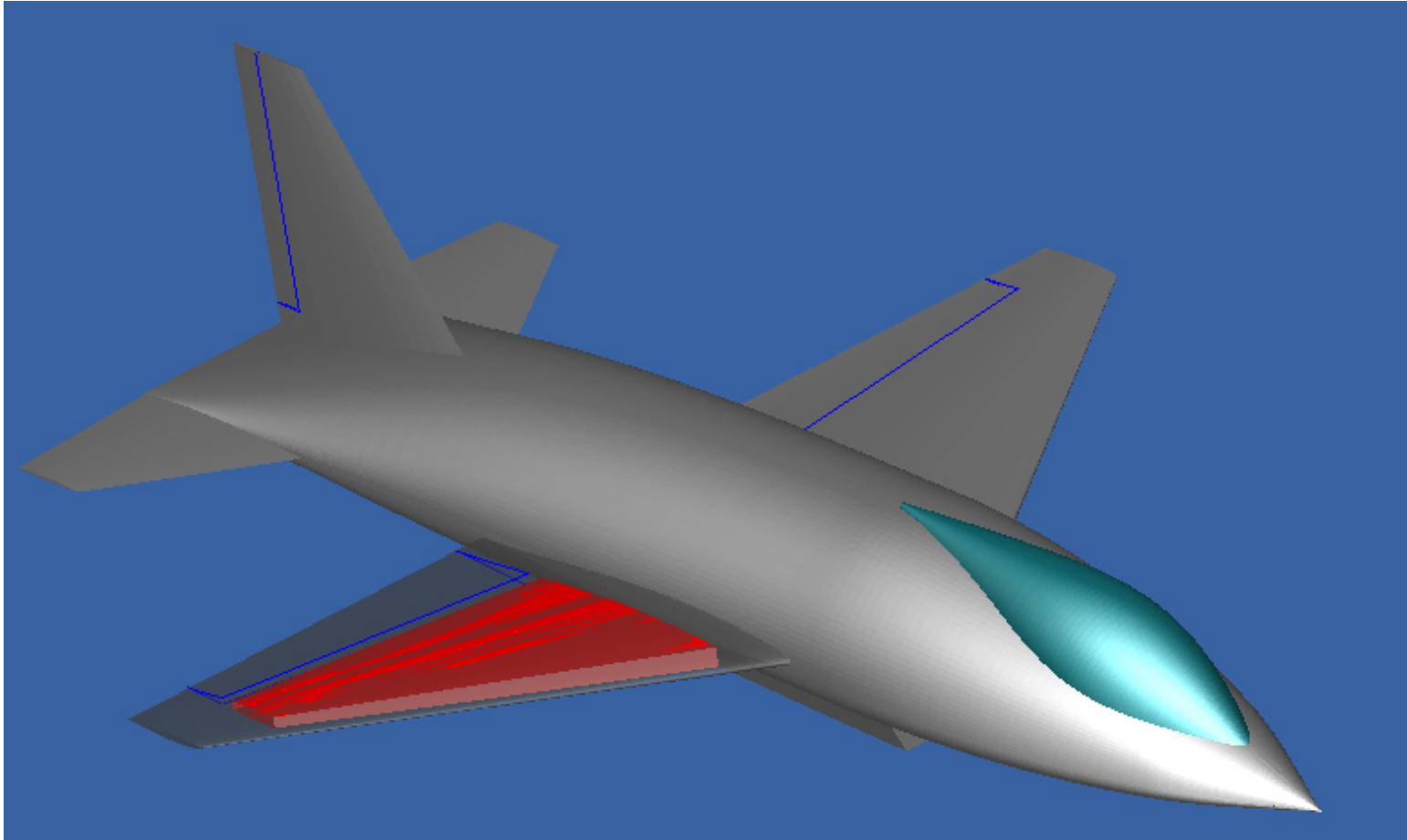
Aircraft Model Creation



Aerospace and
Ocean Engineering

- Conical Surfaces often used in aircraft model definition

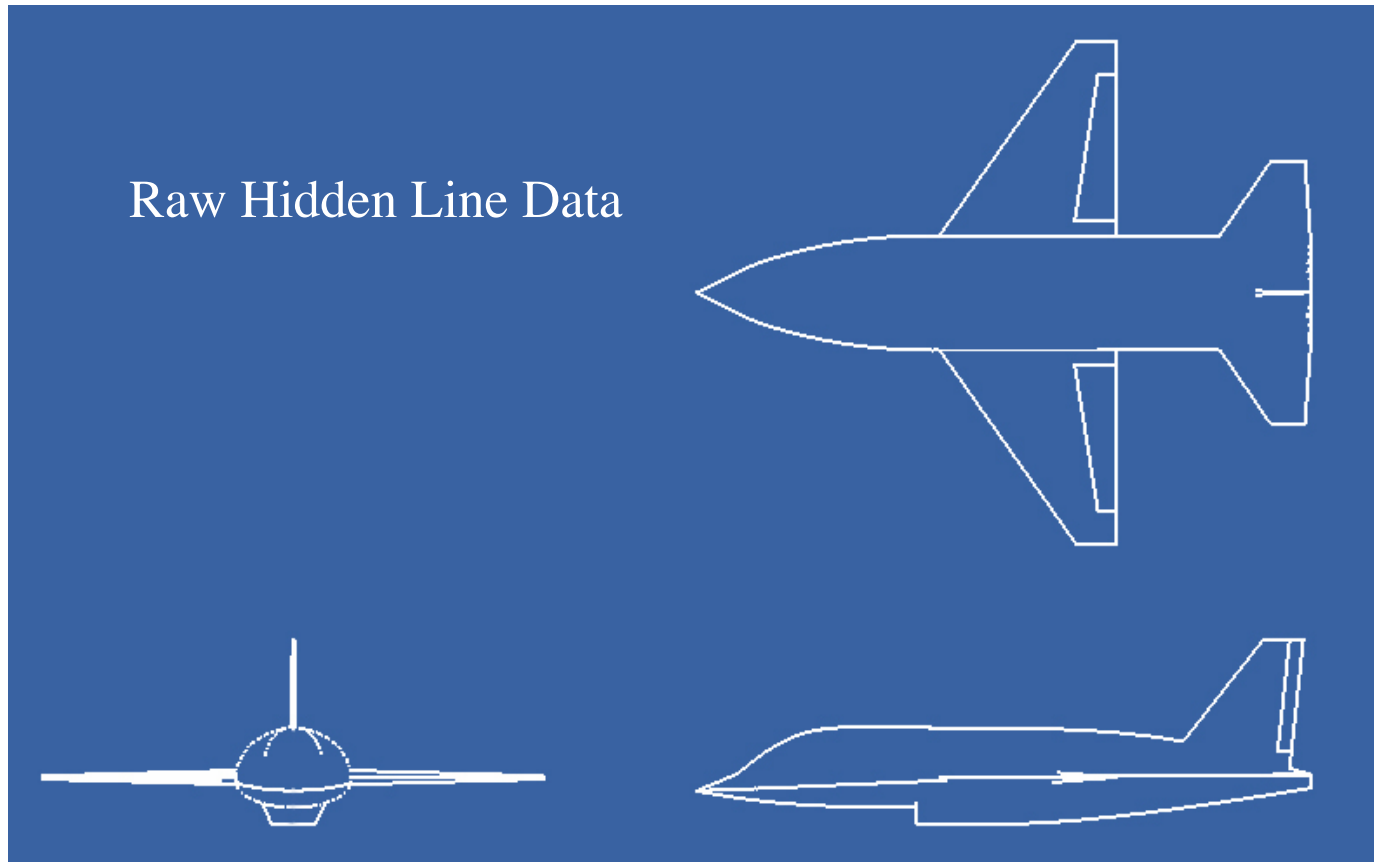
Fuel Volumes



- CAD models are used to create solid models to determine fuel volume



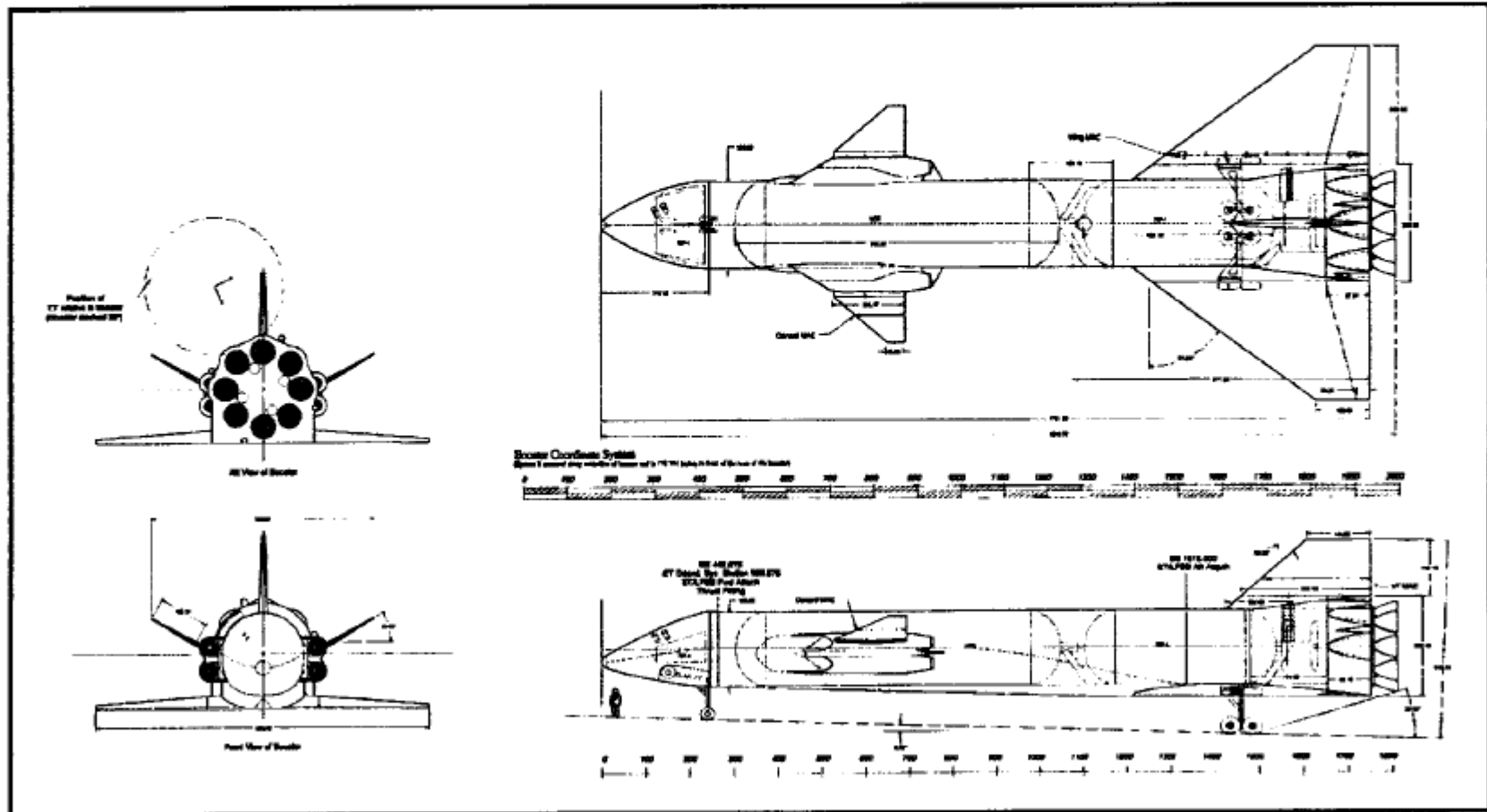
General Arrangement Drawings



- Hidden Line Removal of the 3D CAD aircraft model is used to create General Arrangement Drawings



General Arrangement Drawings



- Lockheed Martin Liquid Fly-Back Booster ~1998

Questions?

