

FlightStream[®] Training Outline

October 2017

Introduction

- Program overview
- Help system and documentation
- Familiarization with user interface

CAD

- Importing CAD models
- Splitting bodies
- Removing unused surfaces
- Fixing blunt trailing edges

Tessellation

- Standard settings
- Increasing fidelity
- Trimmer mesher
- Aligned mesher
- Patch mesher

Geometry

- Fixing patches and holes
- Smoothing/merging vertices
- Applying trailing edges
- Applying wake termination nodes

Propulsion

- Propeller modelling
 - Actuator disk model
 - Propeller blade model
- Jet engine modelling
- Inlets

High Lift Devices

- Application and modelling

Solver

- Initializing solver
- Fluid settings
- Solver settings
- Running solver and convergence plots

Toolboxes

- Solver sweeper
- NPSS
- Stability and Control

Post processing

- Analysis tab
- Using different coordinate systems
- Plots
- Probes
 - Geometric sections
 - Off-body streamlines
 - On-body streamlines