Basic Simulation Operations

Basic Operation

Description

This section will cover the fundamentals of loading a DSix simulation project. We will begin by loading a sample project and setting the initial flight conditions. We will proceed with setting critical simulation parameters and preparing the simulation for data storage. Next, we will cover how to start, stop and replay the simulation. Finally, we explore a few of the data visualization tools for use during real-time execution and post-run analysis. .

What you will learn

Upon completion of this section, you will be able to:

- Load a DSix project and set initial conditions
- Mapping Input and output information between user and DSix project
- Save simulation output for later analysis
- Look at all sections of DSix project available to user

DSix Project

- Start DSix
- Load BARJet project into DSix
- Examine parts of the DSix project
  - Initial Conditions
  - Aero database
  - Input/Output user interface
    - Mapping pilot inputs
    - Creating event trigger
  - Graphics
  - Instruments
- Run a simulation time history
- Save time history

DSix Exercises

- Set up various initial conditions (e.g., airspeed, altitude, ground start)
- Save an initial condition set
- Save a time history run
- Specify a reduced set of variables to save
- Sim Parameters
  - Examine different Data Storage options
  - Examine different Timing options


DSIX
Flight Simulation Environment