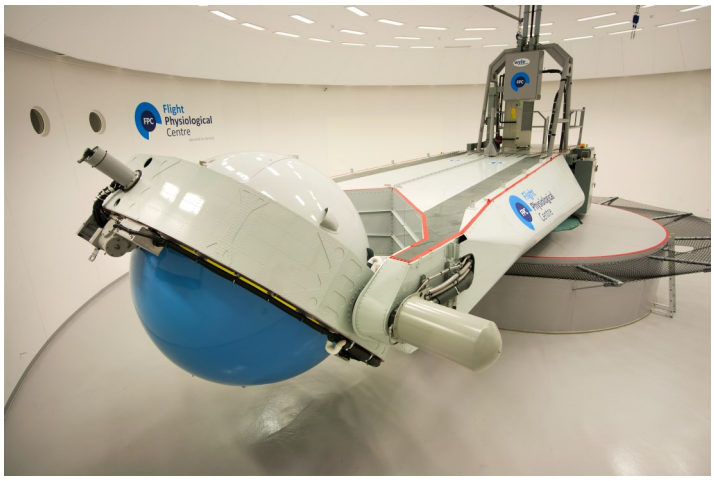
Dynamic Flight Simulator

Introduction

The Dynamic Flight Simulator (DFS) is a combination of a flight simulator and a centrifuge. The main components are a large motor, a 30 feet arm and a two degrees of freedom gondola where the pilot is placed. The pilot is in control and flies the DFS like an aircraft with stick and throttle. He gets response both visually and through the generated G-load.

The DFS has been operational for advanced acceleration training as well as research since the end of 2003.

The dynamic flight simulator is cheaper and more efficient than flight tests in many cases and our customers use it for a variety of training, testing and research.



Technical Specifications

- Maximum G force: 15 G.
- Acceleration up to 10 G/sec.
- DC-motor driven, 1900 kW, 1.4 million Nm torque, weight: 93 tons. Designed to meet the demanding acceleration requirements.
- A two degree of freedom gondola that has the possibility to achieve high angular accelerations in pitch and roll.
- A fully reconfigurable gondola, setup to suit the requirements of the training. We currently use a JAS 39 cockpit insert for pilot training and a turnable seat for special research purposes.
- A visual flight simulation system provides aircraft and weapon system models and an out the window visual presentation.
- The data acquisition system provides the possibility to measure and analyze technical and biomedical signals, such as G-force, G-regulator pressure, ECG, blood pressure etc.

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