Data Feeder Design Writeup

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1 History

Simulations (mechanical & computerized) are an essential part of the modern development process. It is often done for

1. Cost of Effectiveness
2. Safety
3. Proof of Concept
4. Ease
5. Speed

A full prototype does not need development: allowing for all of the above

2 Abstract

The System is to be tested in Simulation Mode. Simulation mode, is to model real events and data in as accurate a model as possible. Since the System is data driven, that means a Simulation must emulate real events via data. Hence the Simulation is Data Driven, in addition.

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3 Concept

Create a Data Feeder that emulates data for all components in all phases (states) of the Sytem to the point the System and Stake Holders are ignorant to the fact the data is simulated and not an actual mission.

4 Intent

Create a Data Feeder specifically designed to work with the Lunar Simulator. The purpose of the Data Feeder is to Feed Data (actually be the Simulator for the Lunar Simulator/System) When data from actual hardware is not available.

Feed all the data related to the Lunar Sequence in all the Phases (States) to the System.

While the System is running in Simulation, the Data Feeder will feed the appropriate data to the System via System Requests of the desired Data. Future development may require the System is alerted to the State Changes so as to ensure the System and Stakeholders are agnostic to the source of the incomming data.

The data modeled by the Data Feeder is independent of System Request.

The Data Feeder will calculate all the needed System Data for the aggregate components for every phase (State) in the System.

5 Stakeholders & Interrests

6 Typical Success Scenario