MICHIGAN STATE UNIVERSITY

### Technical Specification / Schedule FlightViz 2007

Team #3: Boeing CSE 498, Collaborative Design

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### **Project Overview**

- Improve upon FlightViz 2006
  - Add New Application: top down Master Viewer of network simulation data
  - Support simulation of more models: tanks, missile, etc...
  - Beautify the simulation
  - Increase performance
  - Support HLA architecture
  - Add functionally to current DIS network
  - Error handling

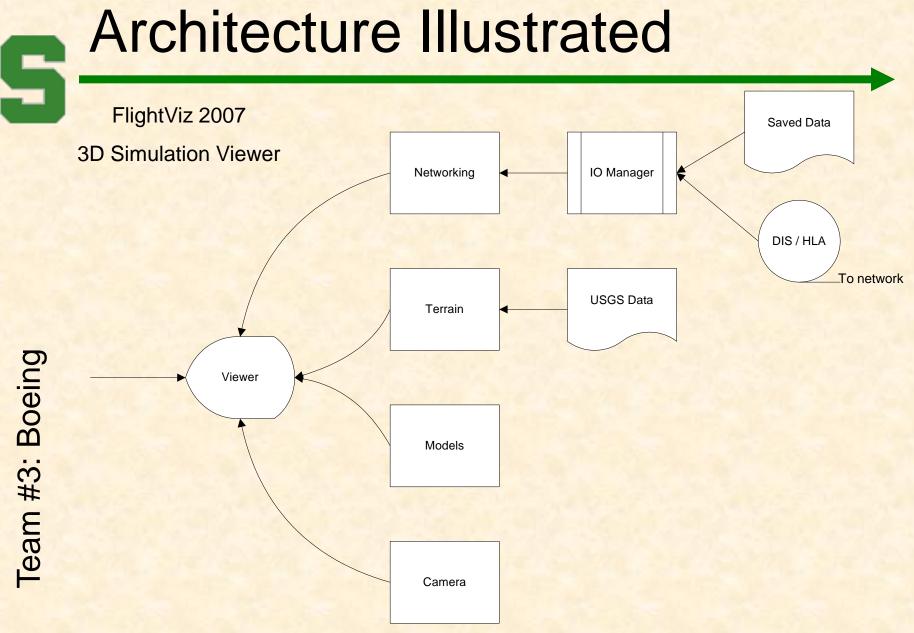
# Architecture Components

- Hardware Platforms
  - Windows based machines
- Software Platforms / Technologies
  - C#
  - Visual Studio .NET 2005
  - Direct X 9.0c
  - .Net Framework 2.0
  - Higher Level Architecture (HLA)
  - Distributive Interactive Simulation (DIS)

### **Architecture Illustrated** 5 FlightViz 2007 **Master Viewer** DIS / HLA Networking IO Manager To network Viewer

Terrain

**USGS** Data



# **Architecture Risks**

- Implementation of HLA
  - Different than DIS, will be easier with restructuring of code
- Restructuring of FlightViz 2006 code
  - Creates delays in project schedule
- Beautify simulation while increasing performance
  - Adversely impact each other
- Master Viewer
  - Dependency on restructuring of code

### **Project Schedule**

- Develop Understanding of Project History Goal: familiarize and review FlightViz 2006 & HLA Date: 01/16/07
- 2. Design

Goal: produce charts and diagrams of all new architecture Date: 01/22/07

3. Scheduling

Goal: detailed schedule of production goals Date: 01/29/07

4. Restructuring Code

Goal: Have completed restructuring FlightViz 2006 code Date: 02/02/07

### **Project Schedule**

- 5. Master Viewer Prototype Goal: Have 50-70% completion of prototype goals Date: 02/08/07
- Model Support Goal: Implement new models in basic forms Date: 02/08/07
- 7. Benchmarking Progress
   Goal: Have ~50% completion of prototype
   Date: 02/12/07
  - 8. Prototype

Goal: Working version of prototype in some form Date: 02/19/07

# Project Schedule 9. Project Video Goal: Project Overview Video for FlightViz 2007 Date: 04/12/07 10. Documentation Goal: Complete Manual for FlightViz 2007 Date: 04/26/07