From Students…
…to Professionals

MICHIGAN STATE UNIVERSITY

Alpha Presentation
Super Synoptics

The Capstone Experience

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Project Overview

• Goal: make flight crew’s decision making process easier
• Summarize flight deck instrumentation cleanly and intuitively
• Identify and suggest solutions to present and potential problems
• Be appropriately obtrusive as per the severity of the situation
System Architecture
Simple Synoptics

--FUEL TANK 1--
temp: 7°F
flow: 0.0 gal / sec
ID: 0
fuel level: 0.00 / 0.00

--FUEL TANK 2--
temp: 35°F
flow: 0.0 gal / sec
ID: 1
fuel level: 8.0 / 30.0

--FUEL TANK 3--
temp: 8°F
flow: 0.0 gal / sec
ID: 2
fuel level: 11.0 / 20.0
Network Check
What’s left to do?

• Complete Synoptics Pages
• Add X-Plane IOS scripting/macroing
• Refine GUI
• Research historic aviation situations and model them in Super Synoptics