

**MICHIGAN STATE**  
**UNIVERSITY**

# Alpha Presentation

## NextGen Aircraft Taxi Assistance

### The Capstone Experience

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*From Students...  
...to Professionals*

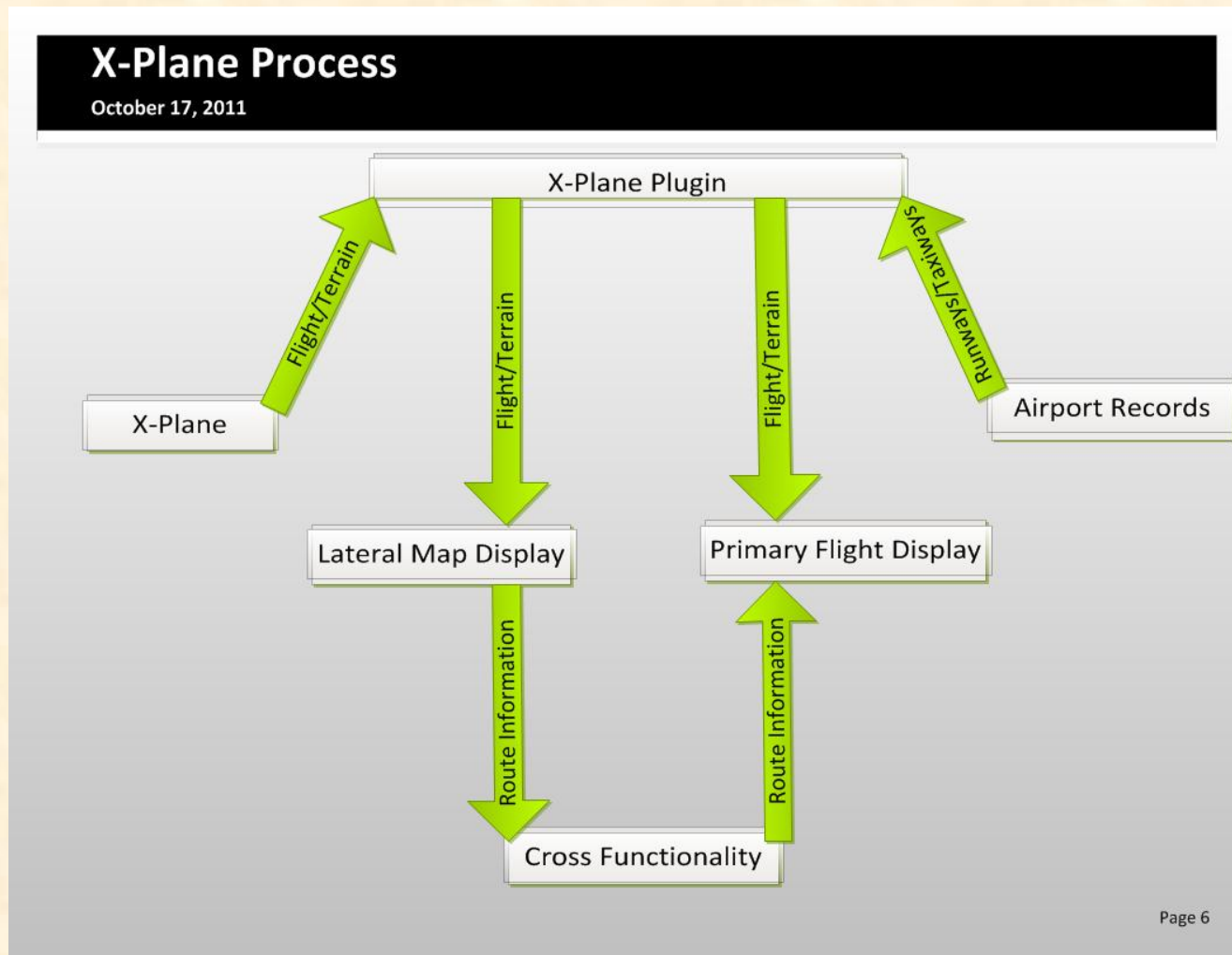
# Project Overview

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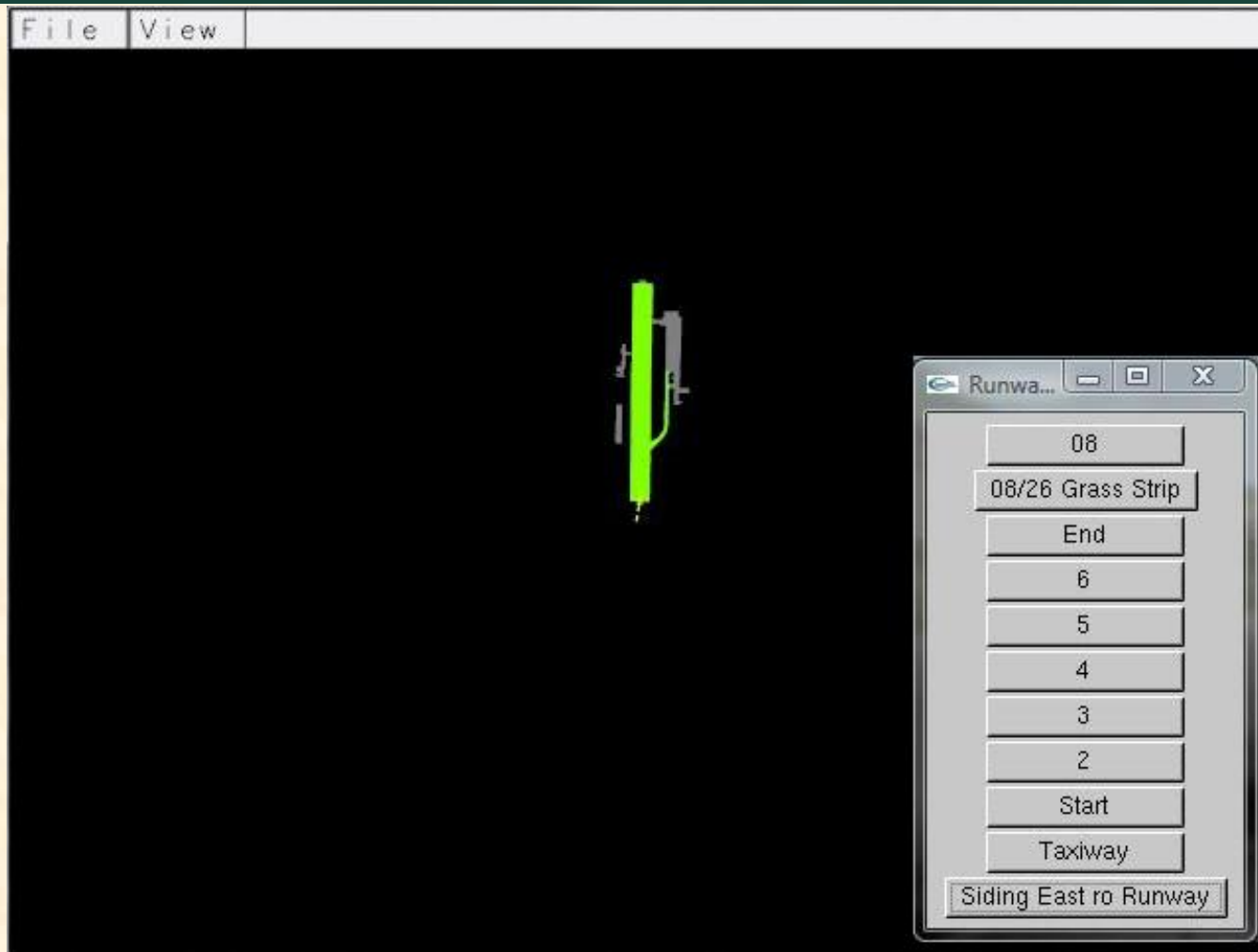
- Integration with NextGen Flight Deck project
- Lateral Map Display
  - Interface for selecting route
  - Expand display to include taxiways
- Primary Flight Display
  - Intuitive guidance queues
  - Warnings for nearby aircraft



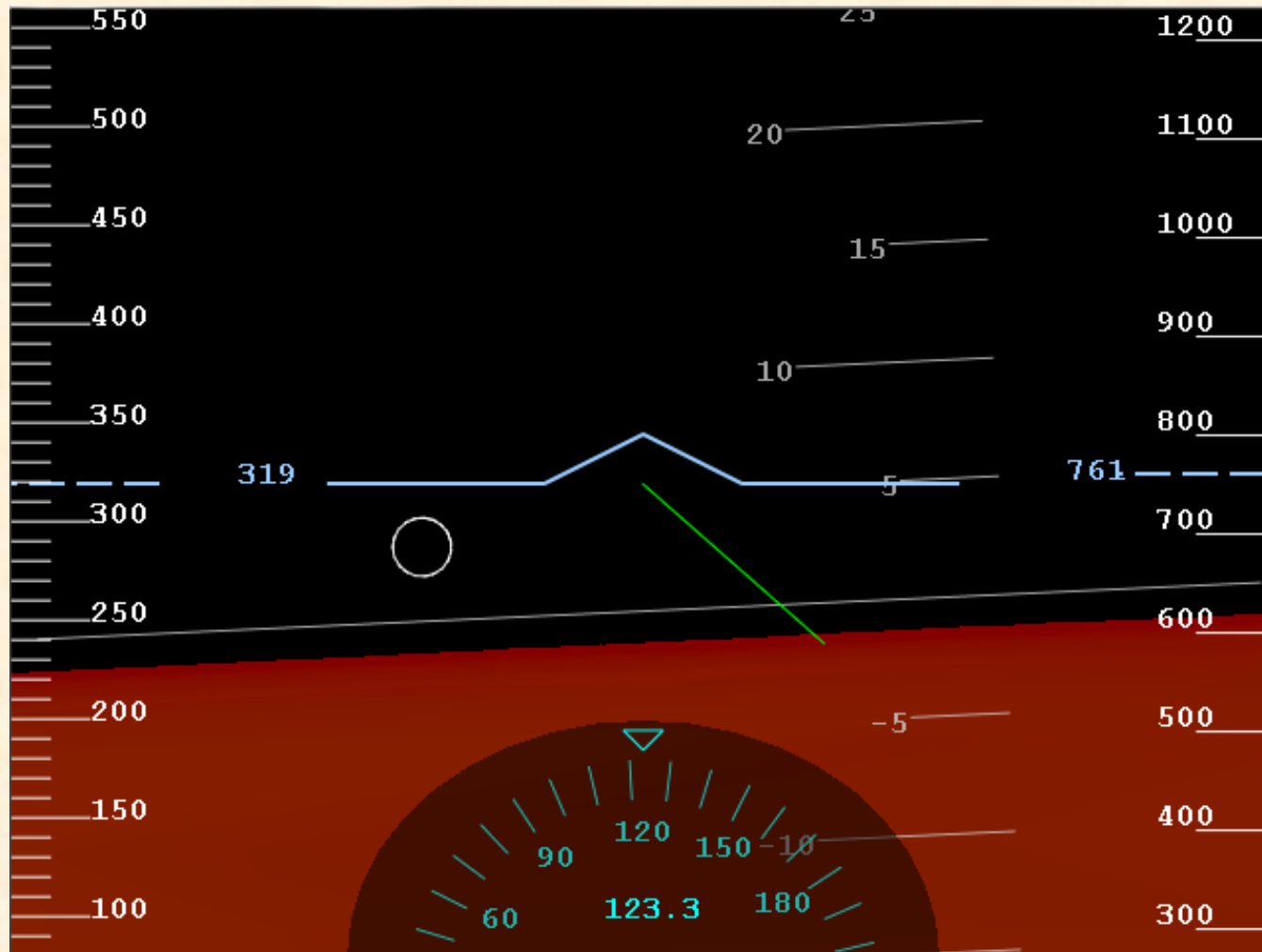
# System Architecture



# Lateral Map Display – Route Selection



# Primary Flight Display – Route Guidance



# What's left to do?

- Lateral Map Display
  - Detailed zooming on airport map
  - Labeling large quantities of taxiways
- Primary Flight Display
  - Guidance queues along route
  - Collision avoidance warnings
  - Drawing runway features

