B25 Flight Simulator Project

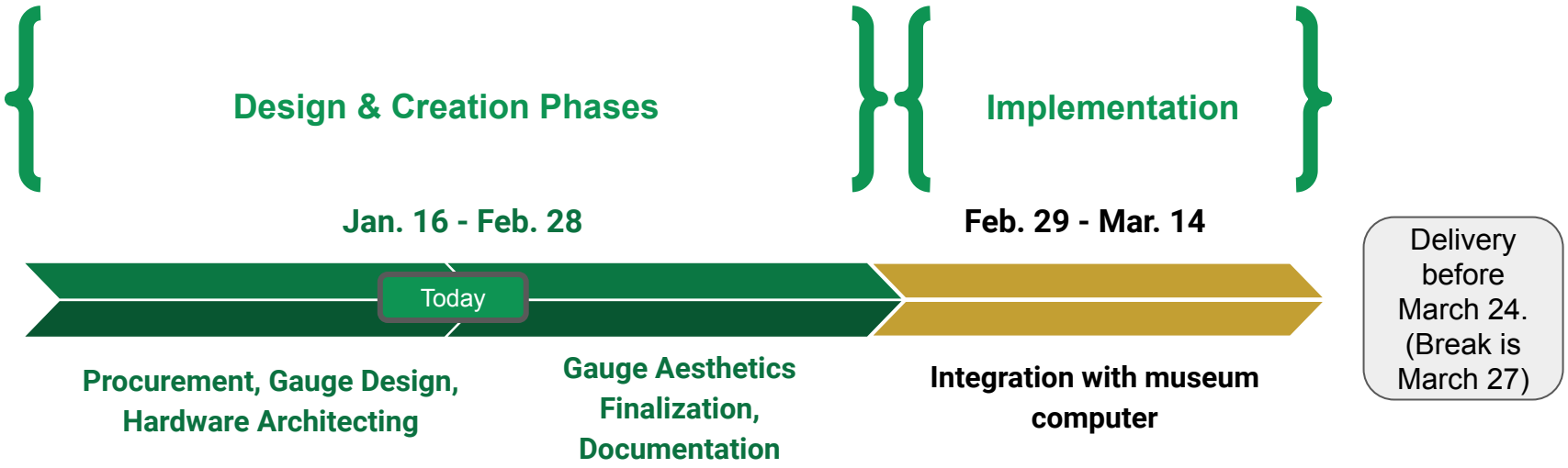
National Museum of WWII Aviation

Milestone #1 & 1/2

Noah Irwin, Shahad Alali, Kala Ahuna, Jon Cummings, Charlie Penvari, Joe Tran

UCCS

Project Phases

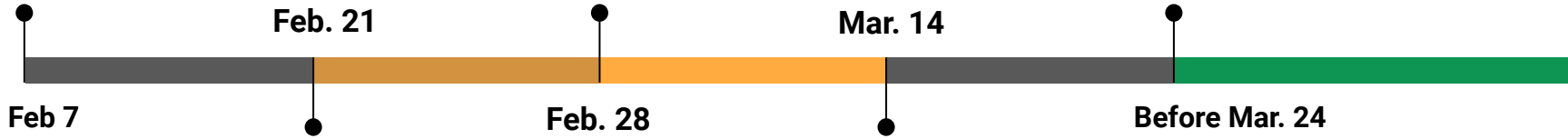


Project Timeline

Milestone #1.5
- Software environment
- Procurement of major hardware/tools.
- Selection of gauges complete
- Hardware architecture

Milestone #3
- Gauge details finalized.
- Final report 75% done.

Final Delivery
- Requirements validation.
- Electronic copies of files delivered.
- Poster rough draft completed.



Milestone #2
- Hardware solution demo.
- Schematics
- Engine Util. gauges complete.
- Gauge graphics fine tuned.

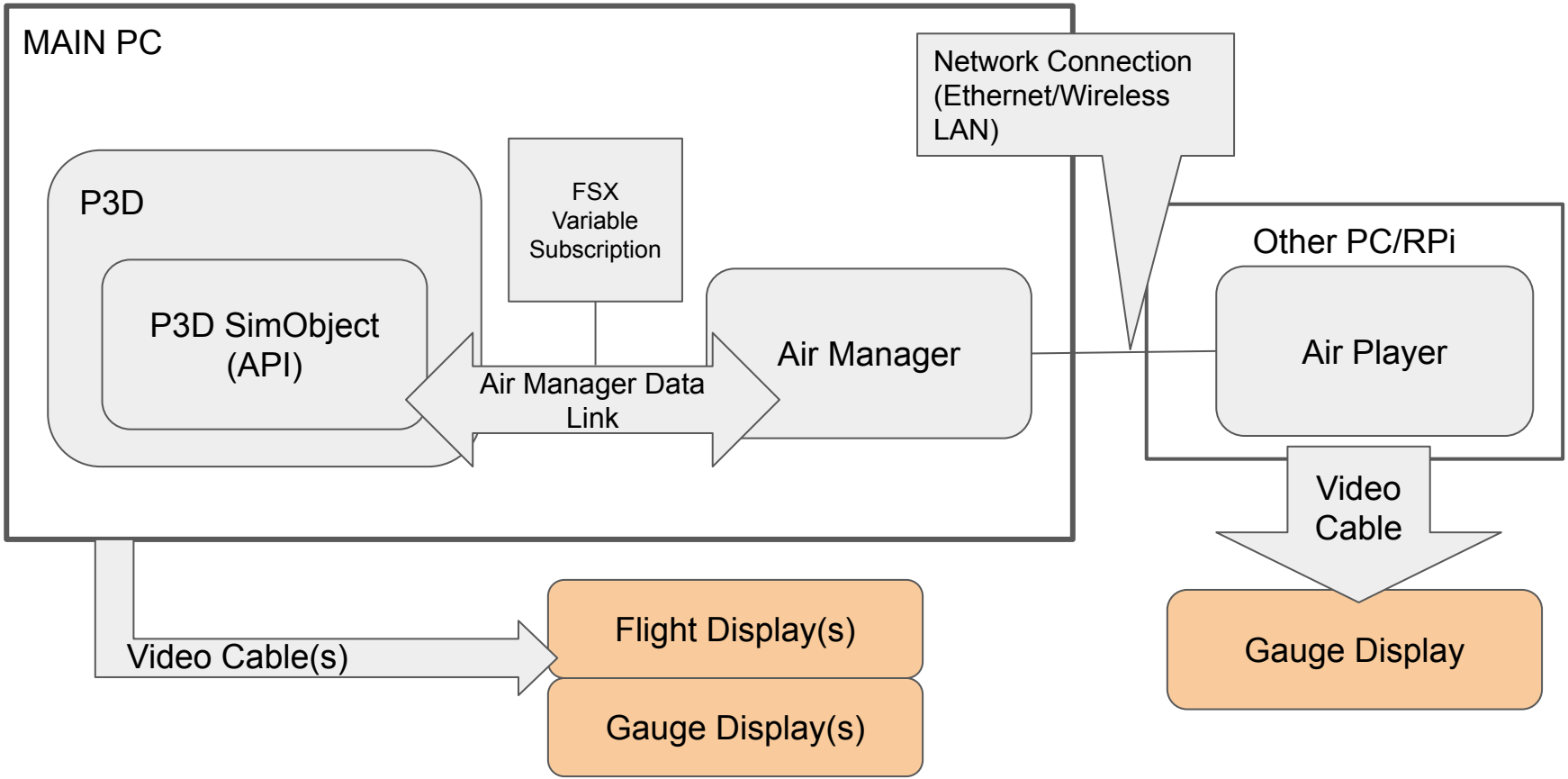
Milestone #4
- Integration with museum computer complete.
- Final report completed.

Current Accomplishments

- Major equipment procurement completed
  - Development PC (team member loan).
  - Texture pack acquired.
- Software environment is setup
  - P3D, Air Manager & Air Player working on development PC.
- Team familiarized with Air Manager & P3D API.
  - Gauge development workflow formulated and formalized.
- Major gauges functional
- Hardware Architecture

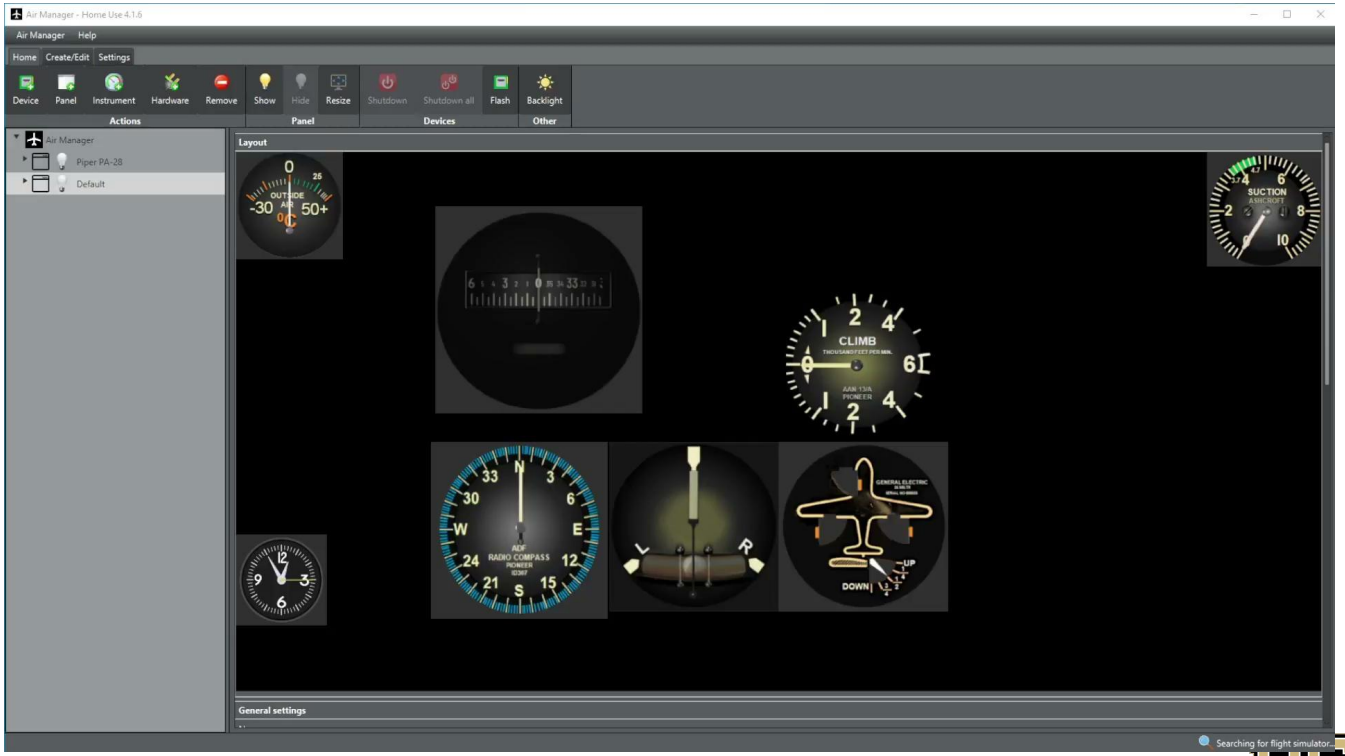
UCCS

Software Environment



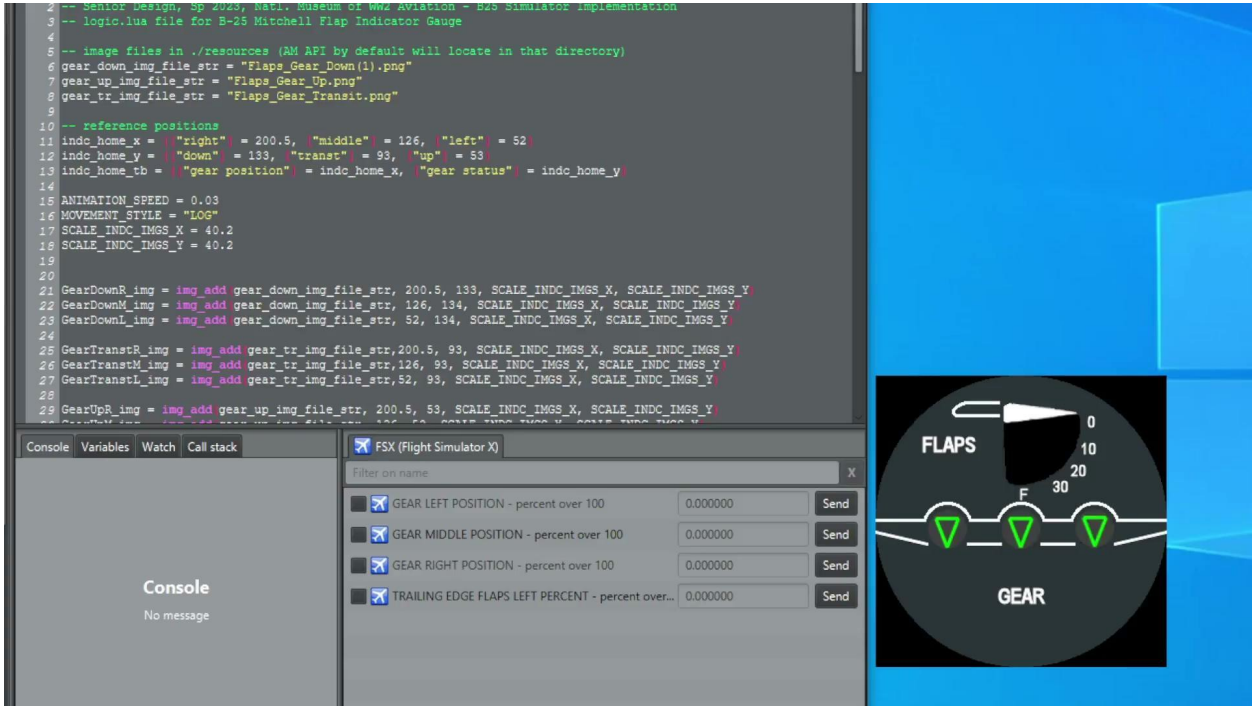
Air Manager Demo

(Layout Config. Capabilities)



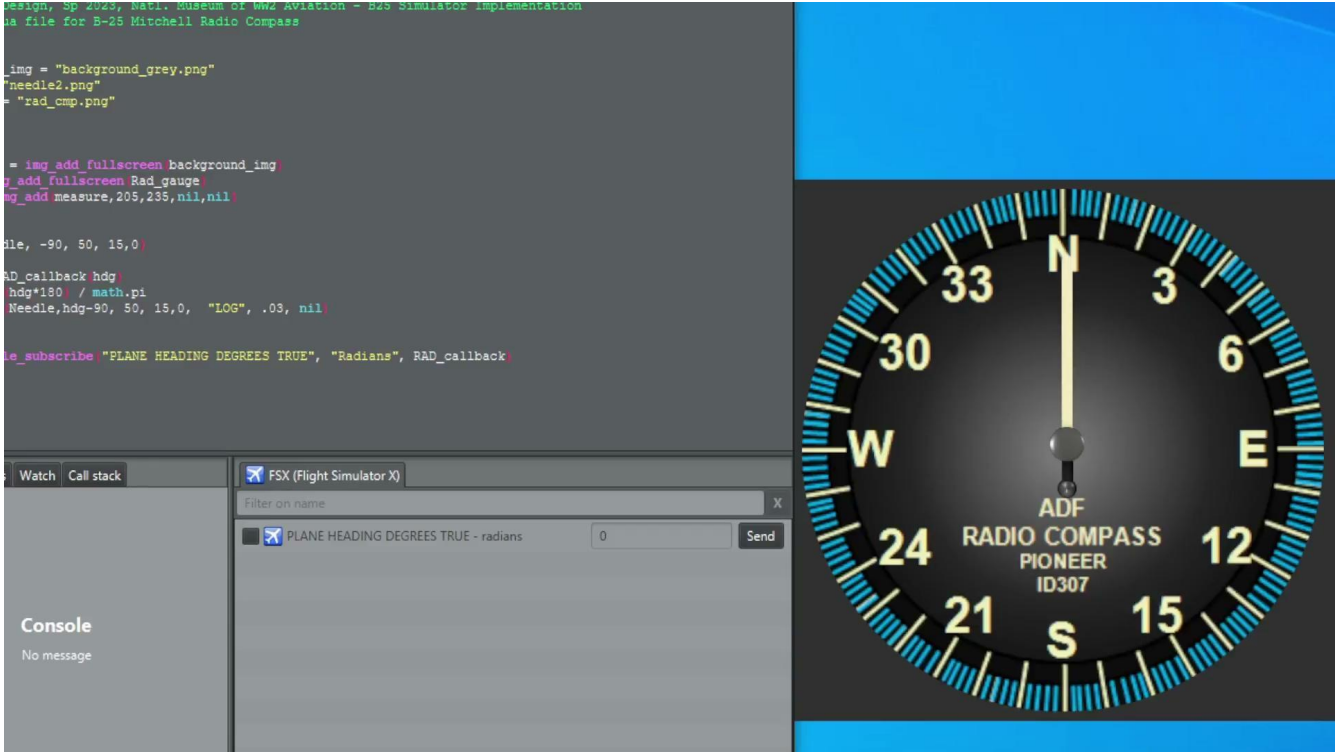
Air Manager Demo

Same Gauge, Three Styles (RAF, B25-B).Time to Complete: Aprx. 2 hrs each



Gauge Showcase

(Gauge Behavior, P3D SimObject Data Connection -> Air Manager)

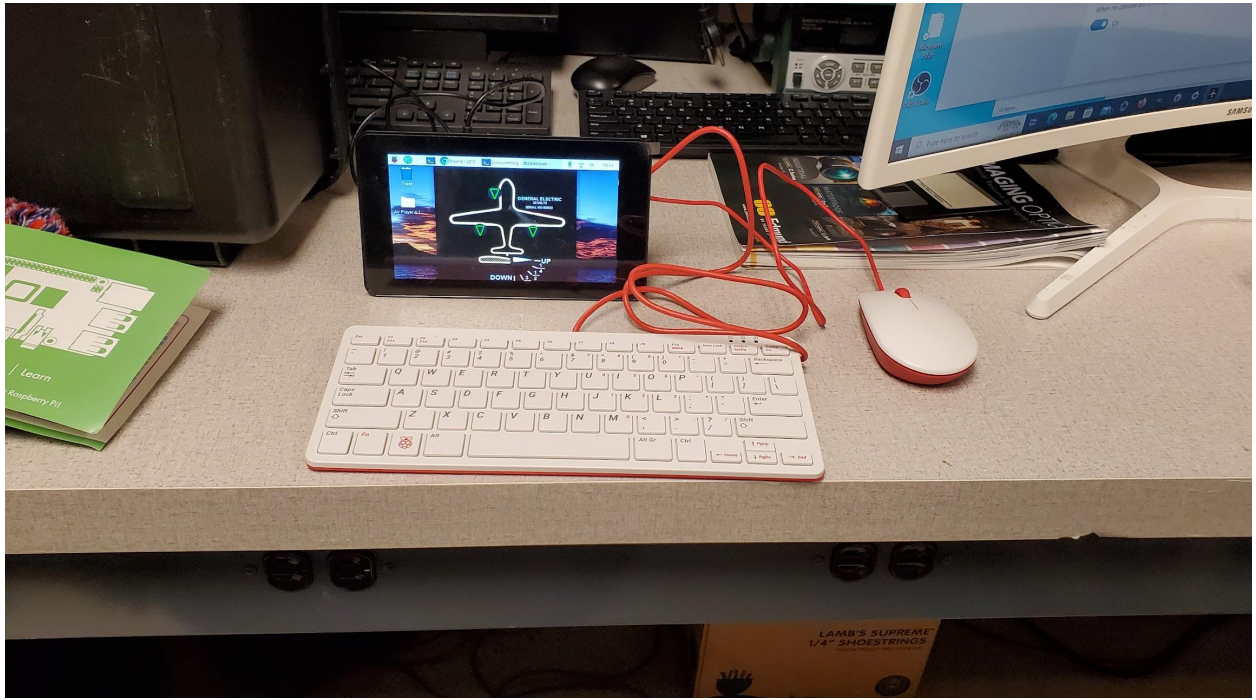


Gauge Showcase Flight Indicator

(Gauge Behavior, P3D SimObject Data Connection -> Air Manager)

Air Player Setup (RPi)

Via Local Area Network (Wireless), Mini Monitor



Multi-Monitor Setup

Next Milestone

- Hardware Demo
  - With:
    - Accompanying electronics schematics
    - Associated hardware interface software scaffolded
- Most Remaining gauges
  - All save for:
    - Autopilot related gauges

End of Project Deliverables

- Gauges working on a museum computer.
- Final Report, on paper and electronically delivered.
  - Design Description and Extension/Integration guide
  - User manuals
  - Schematics
  - Copies of course deliverables (copy of **poster** and copy of final **PowerPoint**).
- Digital copy of code files and graphics that were used.
  - Delivered on USB drive and/or a online repository.

Questions & Discussions