B25 Flight Simulator Project

National Museum of WWII Aviation

Milestone #2

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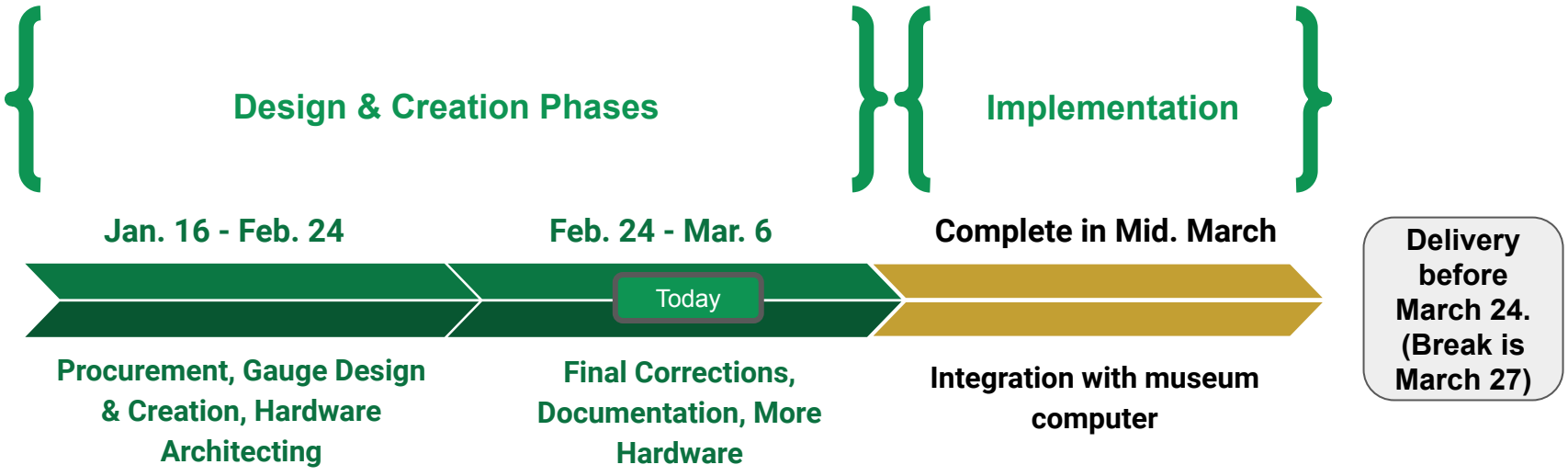
Project Phases (updated)

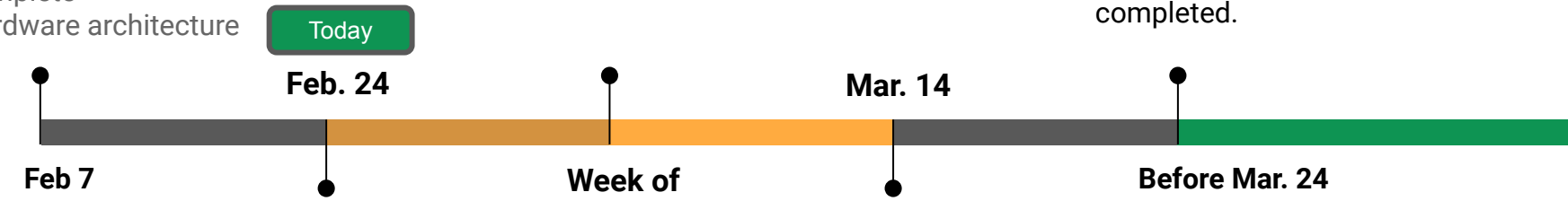


Project Timeline

Complete: 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.
- Documentation & Schematics
- Engine Util. gauges complete.
- Gauge behavior testing

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

Milestone Accomplishments

- Gauges are complete, behaviors are fine-tuned.
  - Engine gauges complete
  - Main fuel gauge completed
- Analog hardware demoed.
- Provisional documentation completed, will deliver today for review.
  - Hardware flight inputs documentation
  - Gauge creation documentation
- Testing solution
  - P3D Sim director - Automated Recorded Flights (“flight instructor” mode), with video recording of gauge behavior with flight view (recorded with OBS).
  - Air Manager variable viewer.

Engine Utility Gauges Version B25-B

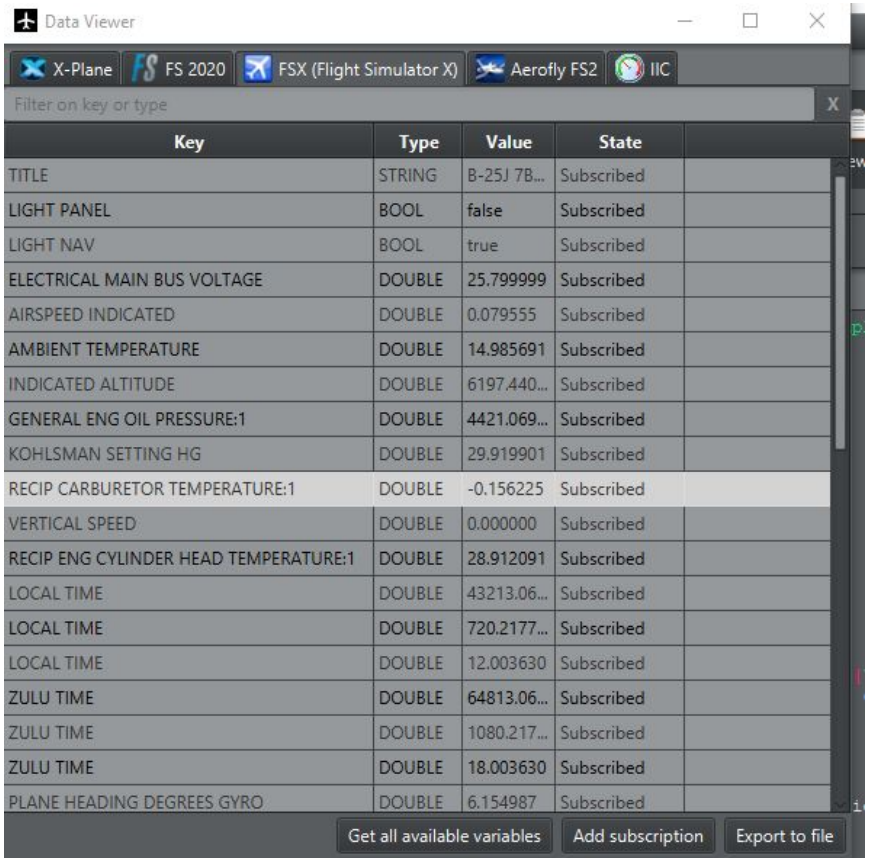
- *Example Gauges for portside engine (#1 engine).
    - Process to make other engine is simple:

Clone portside gauge clone and change engine number variable.

Gauge Testing Solution

Air Manager Variable Viewer

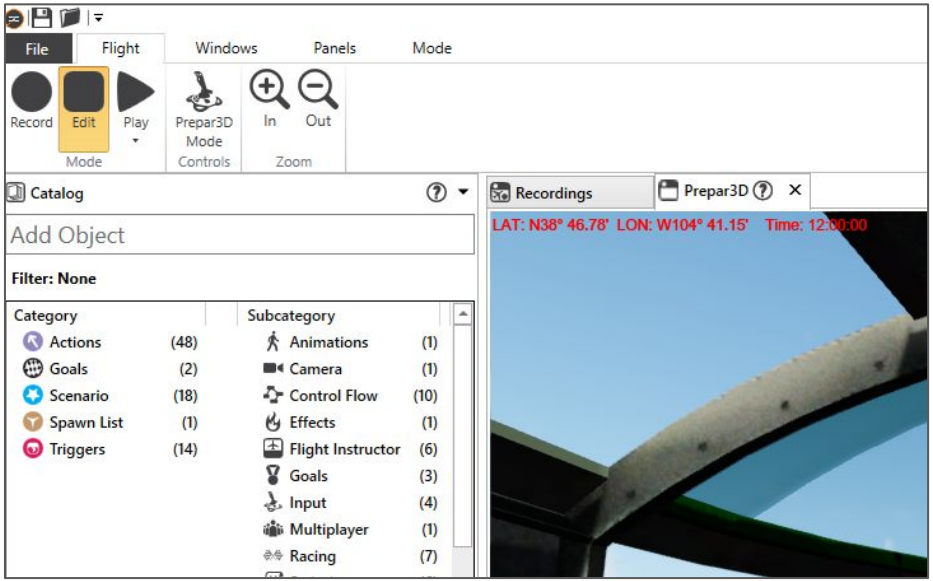
- Allows for quick evaluation of gauge accuracy.



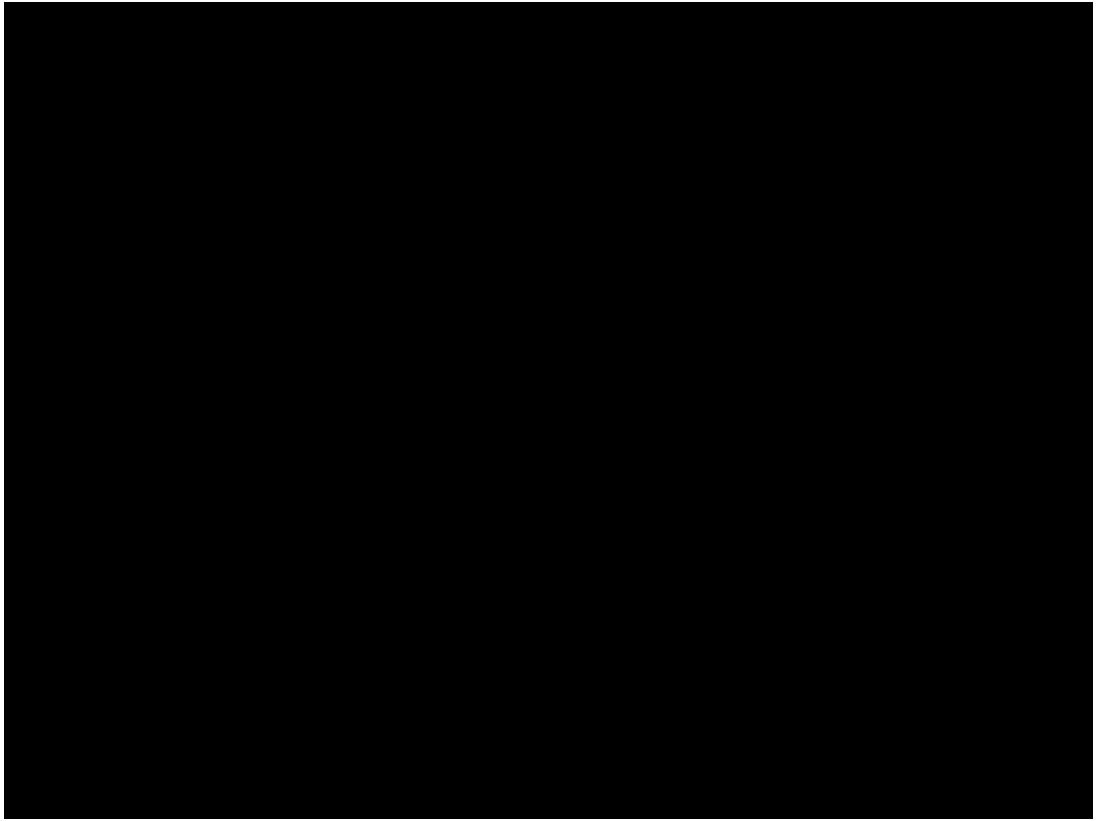
Gauge Testing Solution

P3D Sim Director Flight Recording

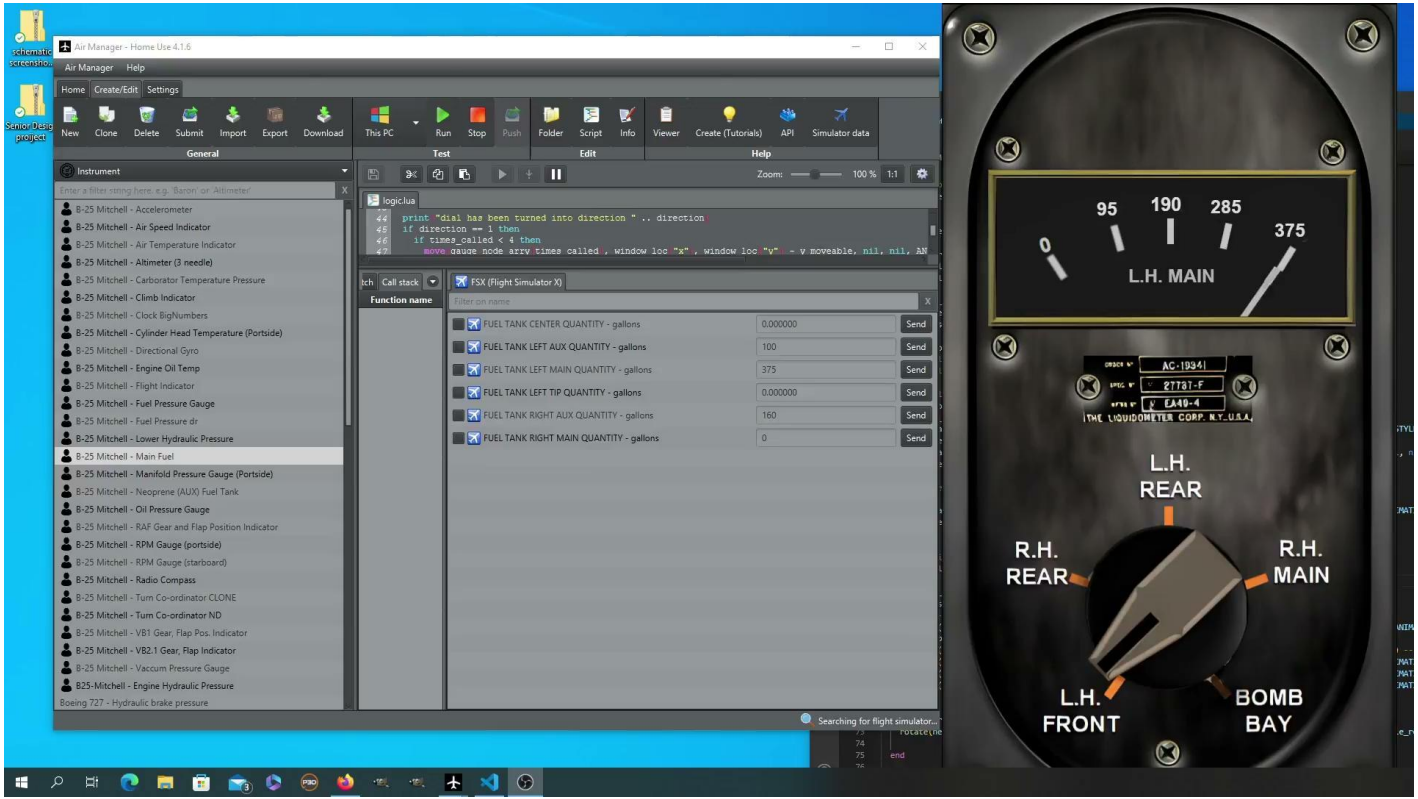
P3D can automatically “re-fly” user flights. Allows for easy gauge behavior evaluation.



Gauges In Flight Video



Fuel Gauge Demo (4 tanks)



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.
    - Will contain gauge packages and separate gauge graphics repository (folder).

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