

# Appendix D

## MINUTES OF PRELIMINARY DESIGN REVIEW

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*This appendix presents the minutes of the Conceptual Review carried out in April 2022. The Preliminary Design Review was an Embraer Internal meeting whose objective was to analyze a System-Design project and simulator to gather feedback to verify it meets your initial Master thesis objectives.*

### D.1 Local

Virtual via Microsoft Teams

### D.2 Participants and Job Experience at Embraer

- Product Development engineer A: 14 years
- Product Development engineer B: 23 years
- Product Development engineer C: 24 years
- Instrumentation Engineering supervisor: 10 years
- Instrumentation Laboratory supervisor: 13 years

### D.3 Meeting agenda

- Review Presentation
- Participant Comments
- Results

## D.4 Review Presentation

The author presented the conceptual review going through the topics:

- Review objectives
- Review Conceptual Design Review
- System Architecture
- Simulator and Test Results
- Feedbacks

## D.5 Participant Comments

- Improve the model description, indicating the operation and the generic models.
- Improve the explanation of the work proposal and which are the deliverables.
- For the Accretion rate sensor model, confirm the expected for the simulation and influences of parameters such as speed. It seems that the thermal model will not be used.
- Include average LWC and MVD from a test run.
- See options to emulate the M300 in this simulator.
- You can continue to evolve the simulator for use at Embraer.
- Could be used in the future by a support team.
- Evaluate equivalent Time graph. Perhaps zooming in on the graph is better than compressing the entire rehearsal time collection.

## D.6 Acceptance

The experts approved the preliminary review of the project, considering opportunities for improvement.