

## 1.1 Meeting Minutes

### Meeting 1 – Project Kick-off

**Date :** Week 1

**Participants :** Tom Nicolaï, Titouan Lepesqueur, Paul Fortune Corroy

**Objectives :**

- Brainstorm project ideas related to aeronautics and AI
- Select a feasible and innovative topic

**Discussion :**

Several ideas were proposed during the brainstorming session. The team agreed on focusing on aircraft maintenance and safety. The idea of detecting cracks on aircraft fuselages using computer vision was selected due to its strong industrial relevance and feasibility with available tools.

**Decisions :**

- Project topic validated: automatic detection of fuselage cracks
- Use of AI and image processing

**Action items :**

- Research existing solutions and datasets (Team)
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### Meeting 2 – Technical Research & Tool Selection

**Date :** Week 2

**Participants :** Team

**Discussion :**

The team conducted research on computer vision techniques and platforms. Roboflow was identified as a suitable solution due to its dataset management, model training, and API deployment features.

**Decisions :**

- Use Roboflow for dataset management and model training
- Use a hosted detection model with API access

**Action items :**

- Collect a large dataset of fuselage crack images (Team)

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## **Meeting 3 – Dataset & Training**

**Date :** Week 3

**Participants :** Team

**Discussion :**

The team collected close to 1000 images of aircraft fuselages with visible cracks. More than 800 images were used for training the model. The training process lasted approximately 5 hours on Roboflow.

**Decisions :**

- Validate dataset quality
- Proceed with full model training

**Action items :**

- Monitor training performance
  - Prepare inference tests (Tom)
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## **Meeting 4 – Implementation & Integration**

**Date :** Week 4

**Participants :** Team

**Discussion :**

Integration of the Roboflow model into a Python script was challenging, especially for retrieving the API key and inference URL. After several attempts, the team successfully implemented a working pipeline.

**Decisions :**

- Final validation of the detection pipeline
- Prepare project artefacts and portfolio

**Action items :**

- Clean and comment the code
- Prepare documentation