



Australian National University

## Weekly and Audit Summaries

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### *Document Identification*

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# 1 Audit Summaries

This section details the relevant files and their location in the repository. Only the most recent audit will be mapped (full trace in the repository listed), due to files being relocated or updated.

The structure of the links (eg. `./Current_Status/Weekly_And_Audit_Summaries.pdf`) indicates that you should go to the top level, and then go to the `Current_Status` directory, and view/open this file.

## Audit 2

### Key Decisions and Outcomes:

In this audit period, we have completed Phase 1 of the project (Analysing and Updating the work of the previous team) and moved on to the second phase of the project (Initial Conceptual and Subsystem Designs). The key outputs from this were an updated list of requirements and conflicts, which are detailed below in the ProForma. Key decisions were made in this regarding certain tolerances and thresholds, as well as following up required additional information.

The risk matrix was heavily updated, as additional risks were identified. This is also in the ProForma, and detailed below. The decisions made regarding these risks were due to the identification of different potential timelines - the installation depends on which order the lasers are complete and ready for installation.

Initial work-package assignments have been made, with Chris & Alex working on designing new CAD models, Wenjie & Brian working on the Water Cooling and Electrical systems, and Paul & Steve working on the vibration analysis and logistics of relocation of components. These are the key components of the second phase.

The group continues to work as a team at Stromlo from 9-5 on Fridays, with additional communication and team work occurring outside this time, communicated via the Slack App.

### Key files:

- `./Current_Status/Weekly_And_Audit_Summaries.pdf` (This document):
- `./Current_Status/ProForma_Ver002.pdf`: This file contains a project overview, scope, work package breakdown, schedule (the three phases, Gantt chart), and risk identification and analysis. This document is still a work in progress. This demonstrates understanding of the project, as well as decisions made for scheduling, work breakdown, and risk assessment.
- `./Current_Status/System_Subsystem_Requirements_Update_Ver001.pdf`: This is an updated version of the previous teams System Subsystem Specifications document, (`./Previous_Team_Work/Artefacts/System_Subsystem_Specifications.pdf`). This shows the work done on analysing the previous teams set of requirements, which required many key decisions to be made on validity of measurements, the relevant additional information available, and the new changes to the conflicts.

This demonstrates the majority of the decisions made regarding the outcomes of the previous work, as well as the decisions that were made to update. This work is a work in progress, as multiple documents require following up still.

- `./Project_Deliverables/Audit_Feedback_Actions/Feedback_Action_Audit_1.xlsx`: (Download or open GoogleSheets Link) This document shows all of the previous feedback that we received, and the actions that were taken for this, demonstrating how we intend to act on feedback received. Much of this feedback was not received until after substantial updates to the project and repository, so much of this had already been actioned. This occurred due to the time delay between the comments. \*Feedback was judged for its value compared to the project at the time it was given\*
- `./Current_Status/Project_Hours.xlsx`: Google sheet link supplied in folder readme. This details the hours and tasks that each member has completed. This is a work in progress. Additionally, deviations between hours worked by each member are due to different tasks of different members, and have been acknowledged, and are expected to balance by the end of the project.

### Key Directories:

- `./Meeting_Minutes`: This folder contains the minutes of all project meetings and communication between group members. These show the important points made in each meeting. These detail many key decisions that were made, as well as information attained.
- `./Client_Communications/Meeting_Notes`: This folder contains all of the communications with other stakeholders or points of information. These communications are relevant to some of the decisions made in updating the System Subsystem Specifications document. These detail the source of many key decisions that were made.
- `./Project_Deliverables/Project_Background_Information`: This folder contains documents on the background theory of the project. These were not produced by us, but any reader may have an interest in the more technical science or information behind it.
- `./Project_Deliverables/Dome_Photos`: This directory includes photos that were taken indicating the updated measurements of the dome. These are used for traceability of measurements, and for justification of updates to requirements in the System Subsystem Specifications document.
- `./Project_Deliverables`: This directory is a holding place for all files with their previous versions, as well as files that were seen above. This shows the updates of the ProForma document, as well as other files of interest.

## 2 Weekly Scheduled Events

Scheduled Recurring:

- Repository Submission - Monday 9am - (Audit Weeks Only)
- ENGN4221 Tutorials - Mondays 1300-1400 - Weekly

- Field Work at Mount Stromlo Observatory - Friday 0900-1700 - Weekly
- Tutor Meetings at Stromlo - Friday 0900 - 1000 - Weekly
- Client Meetings - Friday 1400 - Weekly

Scheduled One-Off:

- Telescope and Laser Lab Induction / Tour - Friday 3 - 11/08/2017
- Telescope Final Induction - Friday 5 - 25/08/2017

Other:

### 3 Weekly Summaries

#### Week 3

##### Key events:

Meeting on Thursday 10/08/2017

- Decided on roles
- Produced pro forma document

Orientation/Tutorial on Friday 11/08/2017

- Reviewed repository, added missing or incomplete sections
- Guided tour of the laser laboratory and telescope
- Possibly allowed to modify telescope mounting bracket
- Access needed to the encoder

#### Week 4

##### Key events:

- Worked on verifying and clarifying all of the requirements so far -> progress made on removing unnecessary requirements and adjusting existing ones based on changes in the situation, but another meeting with James Webb is required to follow up on the rest of them.
- Identified all possible scenarios regarding the timing of the installation of the laser in terms of configuration, and producing conceptual designs.
- Took measurements of the interior of the telescope in order to satisfy space requirements, as well drawing diagrams indicating the positions of the powerpoints for the electricity requirements
- Met with the client (Celine) and updated her on the progress of the project thus far; work that has been done on requirements and design so far, and the expected division of work in the future.
- Went through feedback received and detailed the corresponding actions taken (See `Feedback_Action_Audit_1.xls`)

## Week 5

### Key Events:

- Analysis of previous teams requirements completed, interim document added. This indicates completion of Phase 1 of the project.
- Preliminary CAD drawings of mounting structure generated
- Conflicts between current and previous measurements, as well as temperature, power, etc. addressed
- Risk Matrix updated to include key risks that may occur, as well as the mitigations for these
- Work Packages determined, initial assignments of team members to these packages have been made
- Full telescope induction complete, allowing proper (unsupervised) access to the dome