



# N4 SOLID TEAM

## WEEK 1 REPORT



# ACHIEVEMENTS

1. Introduction and Orientation of new members
2. Planning of the next static test
3. Fabrication of liner
4. Preparation of Specimen for tensile strength test



# 1. Introduction and Orientation of new members

- A brief overview of the solid propulsion team was done and new members were familiarized with the team's workflow
- New roles were assigned to different members to ensure efficiency and accountability



Team member	Role
Nephth Gakuya	Team leader
Franklin	Ignition
Collins Kinyua	Ignition
Lenet	Log activities and pictures
Nelly	Purchasing
Ryan Wamburu	Documentation
Brian Ikiara	Inventory



## 2. Planning of the next static test

A detailed roadmap of our workflow was drafted and a timeline of when we were going to carry out the static test was discussed.

### SUMMARY OF THE TIMELINE:

WEEK 1-2: Failure analysis, Liner Fabrication and Component Fabrication

WEEK 3: Grain cooking, Test stand refurbishment and Motor pre-assembly

WEEK 4: Final motor assembly and Static test

### 3. Liner Fabrication



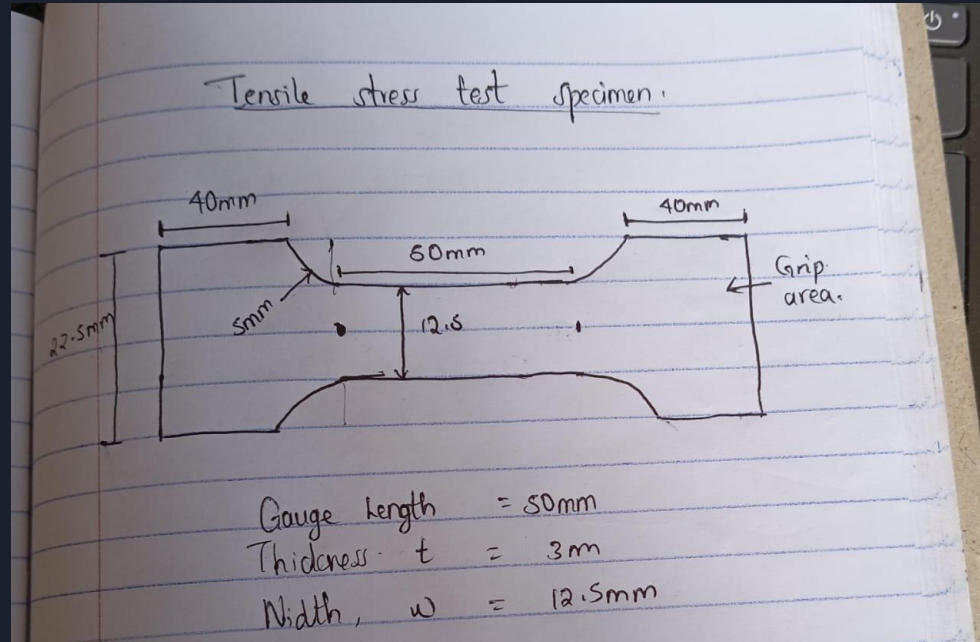
Hardener and Epoxy mixed with a 1: 50 ratio



Liner left to cure on the mandrel

## 4. Preparation of Specimen for tensile strength test

A specimen based on ASTM standards was sketched for the tensile strength test which will be done during the second week





# Challenges Encountered

1. Delayed machining of bulk heads due to workshop occupation

- The workshop was in use by the internal attachment students





## THIS WEEK'S OBJECTIVES:

1. Finalize the error analysis from previous static test
2. Perform mechanical tests i.e. Tensile Strength test
3. Machining of new bulk heads
4. Grain cooking

