

Nakuja internship
Felix

Progress report format

Tasks completed last week

- Acquisition of N1 motor material
- Simulation of flight performance of N1 rocket
- Selection of N1 final geometry
- Fabrication of coring tool
- Ignition system fabrication and testing

Acquisition of N1 motor material

This week we were able to acquire a PN25 40mm x 4.5 UPVC pipe from apex steel limited at their athi river factory

The pipe will be used to fabricate the N1 rocket motor

Simulation of flight performance of N1 rocket

After material acquisition we were able to run multiple simulations finally settling on four different motors

The progress and information is as depicted in the [nakujaproject/N1-motor](https://github.com/nakujaproject/N1-motor) repository

Selection of N1 final geometry

Grain geometry and dimensions for the N1 rocket were determined and four possible motors chosen for testing

Fabrication of coring tool

We fabricated new coring tools for the proposed motors

Ignition system fabrication and testing

Ignition systems were developed and tested but the test was limited by power thus new power sources were to be found and implemented

Tasks in this week

- Casting of fuels
- Static testing
- Nozzle fabrication

Timeline

Month	Week	Tasks
Mar	Week 1	Machining of N2 nozzle
	Week 2	Design of teststand
	Week 3	Fabrication of test stand
	Week 4	Casting of solid motor rocket
Apr	Week 1	Design of V1 of N1 solid motor rocket
	Week 2	Iterative testing of SRM
	Week 3	Integration of propulsion with the rest of the rocket
	Week 4	Launch of N1 rocket