

# Kiwi 2 Space Update

Kiwi 2 Space is participating in the international [N-Prize competition](#): a *nearly* impossible global competition to launch a tiny satellite for under £999 (~\$2,300 NZD). Three teams from New Zealand (making up around 12.5% of the total worldwide entrants to date) are taking on this challenge.

## Introductions

For those that do not know me, I'm Iain Finer and am the team lead of Kiwi 2 Space and am also involved with the NZ Space Foundation as a staff/member. What you are about to read will be a series of short blogs/posts as I try to achieve the impossible and put a satellite into orbit as part of the N-Prize competition, by building rockets and rocket engines!

Will I succeed? I'm not sure, but I sure as hell hope to put NZ on the space map no matter the outcome!

## Pre-testing thoughts

So this weekend its engine testing time, again....

Why again? Back in the End of June we tried firing a small liquid fuelled rocket engine, but only got a pad full of propellant due to ignition issues, (we were trying pyrotechnic) . So back to the drawing board to resurrect the old torch igniter I made late last year, after a lot of researching, a new torch igniter was made and it's only been this week that I've been able to get it to a testing stage (another story!). Making an igniter and getting it to work once is relatively easy I've found, but getting it working reliably and every time is a different thing! Tonight in the shed validated that, a whole lot of bang but no buck, I know the problem and I'll get it sorted tomorrow night. My old torch igniter worked so there's no reason for this new improved one not to!

The list for the weekend continues to grow

- Get O-rings
  - Get Nitrogen bottle
  - Finish igniter
  - Calibrate load cell
  - Re-assemble engine
  - Fix Ox valve
  - Clean igniter solenoids
  - Test new firing system box
- The list goes on....

If this was easy I guess more people would be doing it!!  
Until after the weekend...

*Iain*

