



FUN in Space

The Nayif-1 opportunity: FUNcube-5 Update!



Wouter Weggelaar, PA3WEG
FUNcube Team





Vorige VHF-dag

Aankondiging van het Nayif-1 cubesat project
Wie was daar bij?



Het NAYIF-1 project

Kick off of project 26 November 2014

Eind 2015: Flight ready

Ruimtevaart betekend meestal vertraging!

Lancering in de zomer (2016 ;))

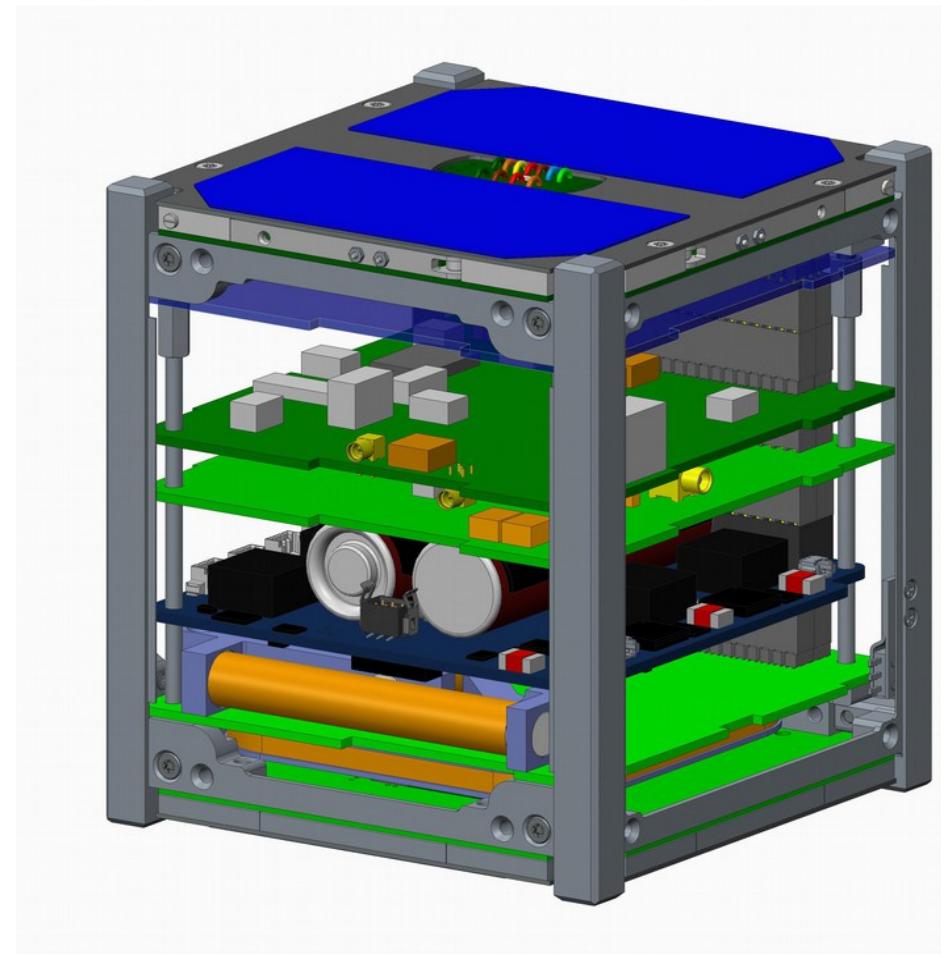


FUNcube-5 on Nayif-1

Complete mission!

Will contain the
same systems as
FUNcube-1

Will function in a
similar fashion





Nayif-1 details

FUNcube transponder aan boord

Betere UHF to VHF linear transponder

→ upgrade van de LO's

→ meer output power

→ ander geheugen aan boord





Mission objectives

- Nayif-1-MO-1

To characterize and validate the accuracy of a thermal model of Nayif-1 with in-situ temperature measurements in space.

- Nayif-1-MO-2

To determine the evolution of the solar cells performance in space during the mission design life of 1 year.

- Nayif-1-MO-3

To allow high school level students to determine the Nayif-1's orbital velocity using the Doppler shift effect observed with the Ground Station.

- Nayif-1-MO-4

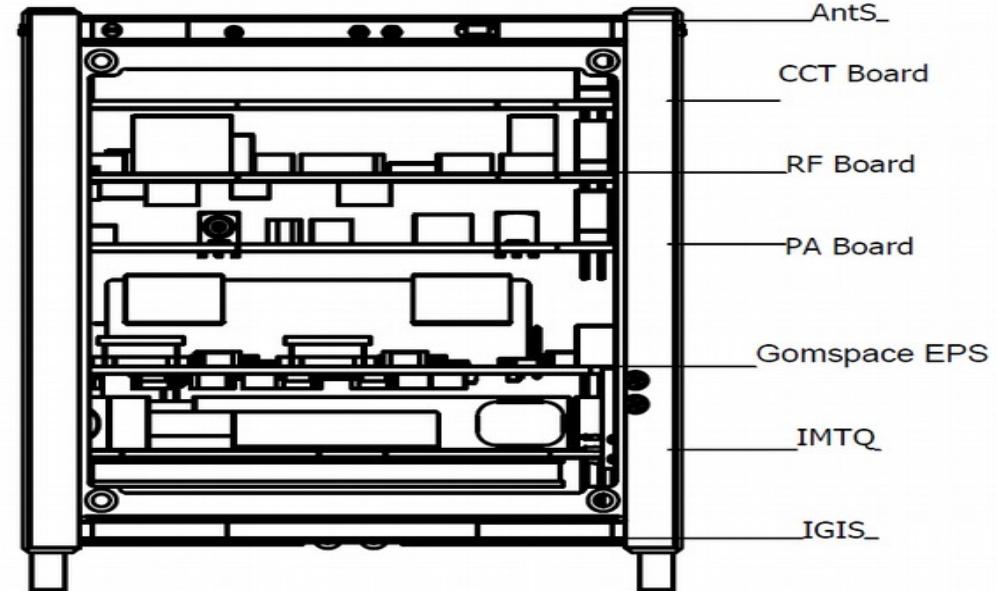
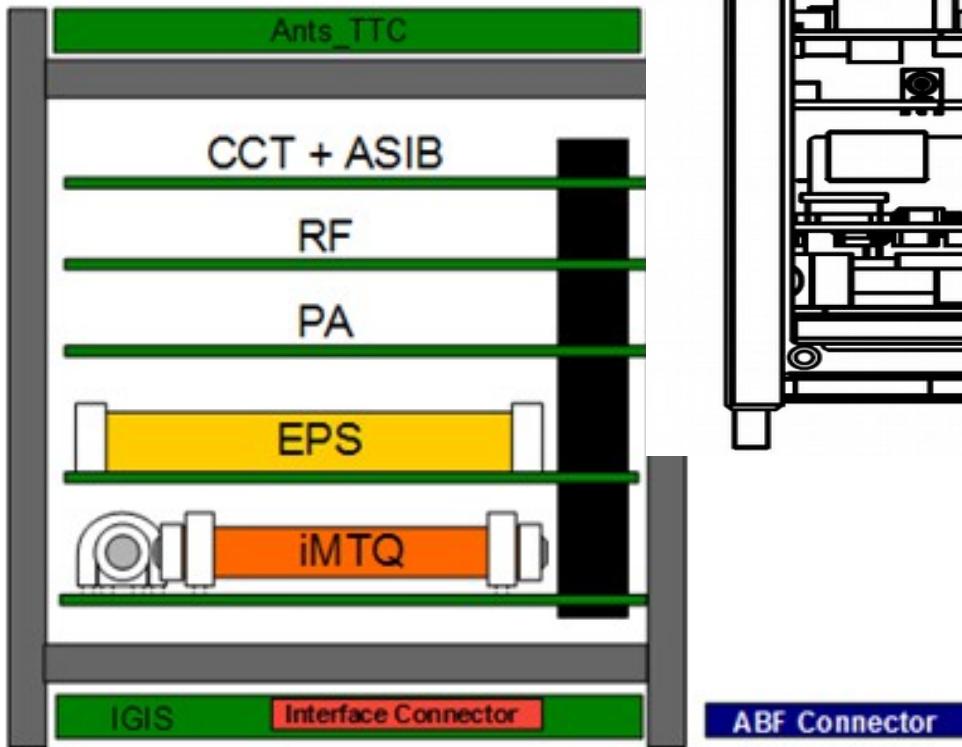
To allow elementary and college level students to emit short text messages using the Nayif-1 satellite.



AMSAT-NL
Radio Amateur Satellites



Stack definition



AMSAT-NL
Radio Amateur Satellites



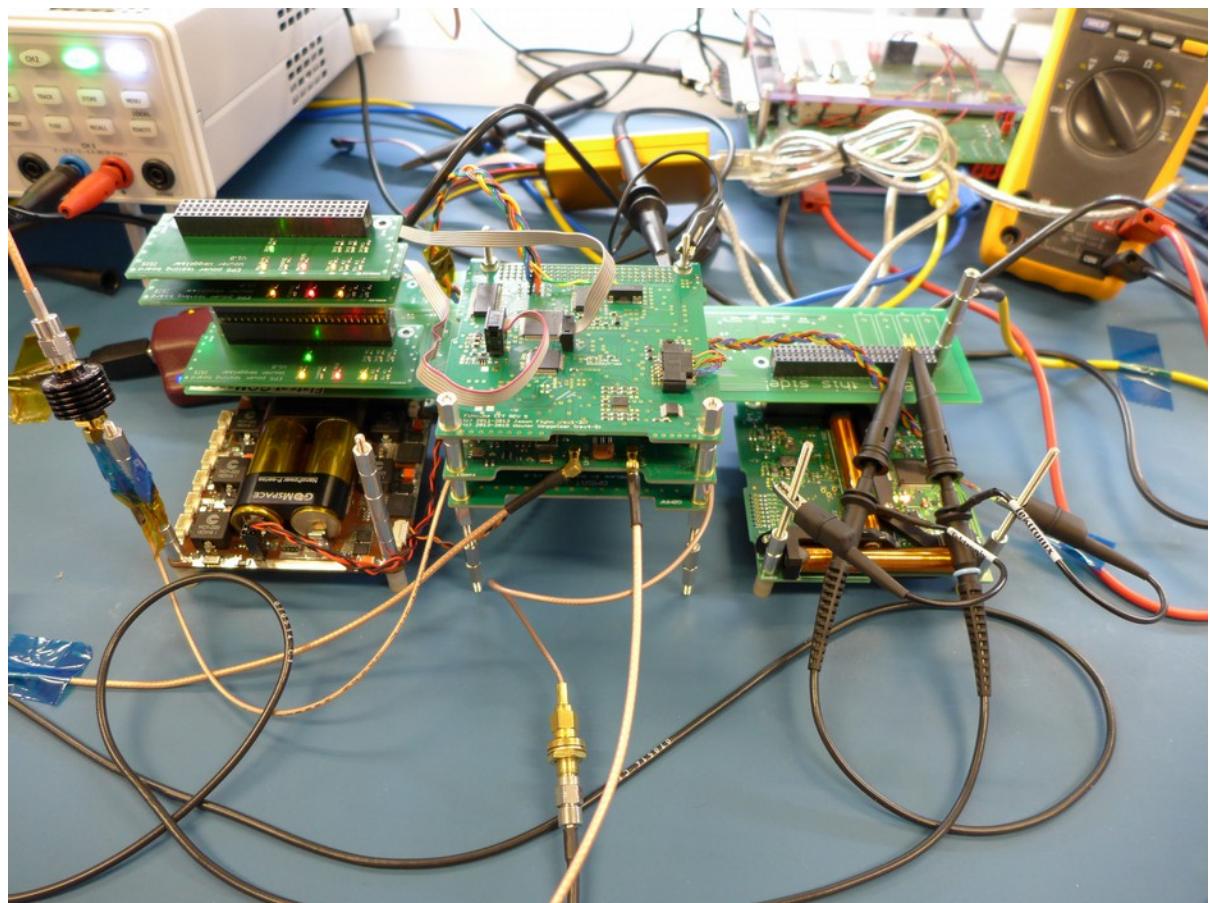
En dan begint het testen

Testen

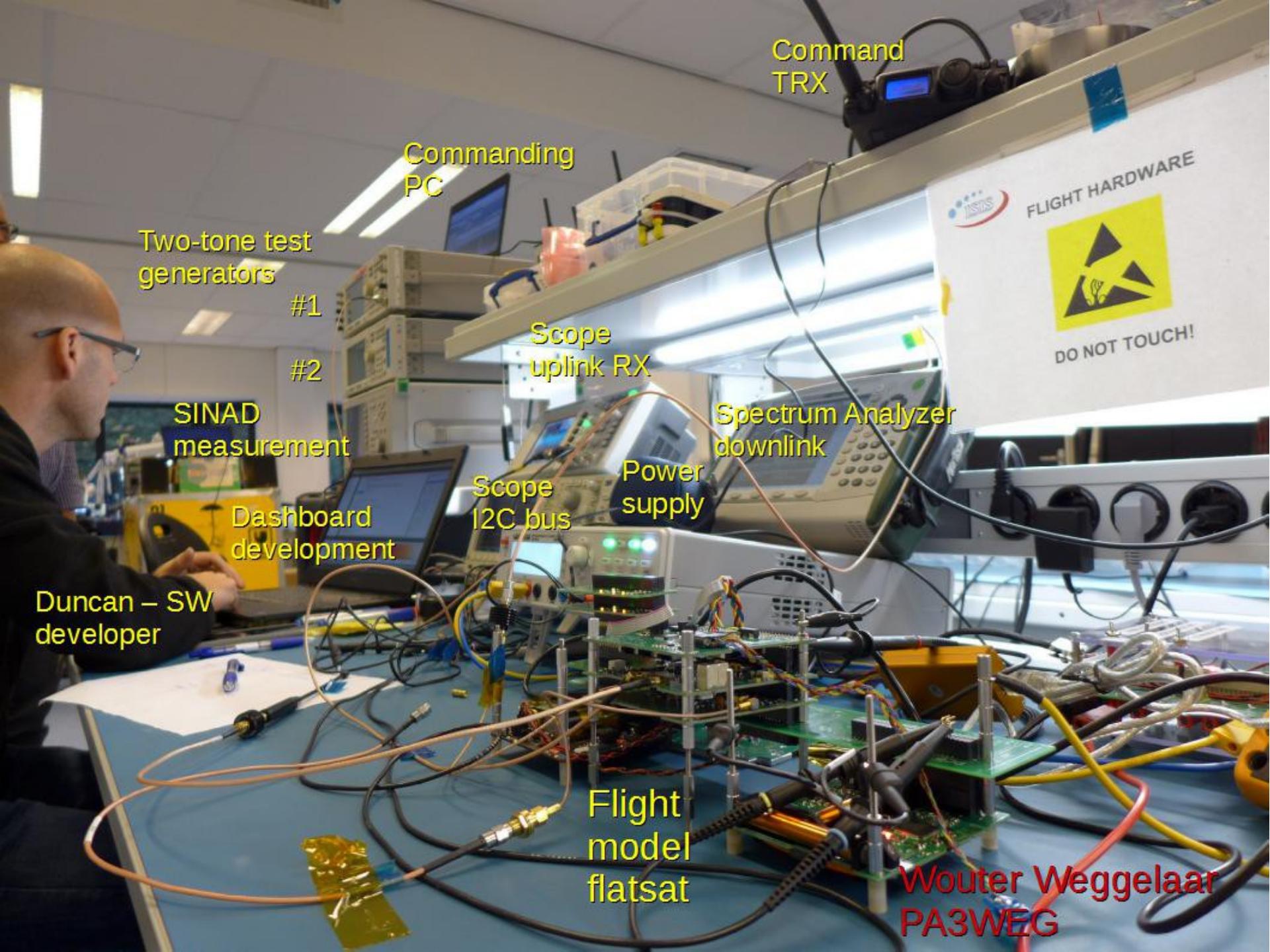
Testen

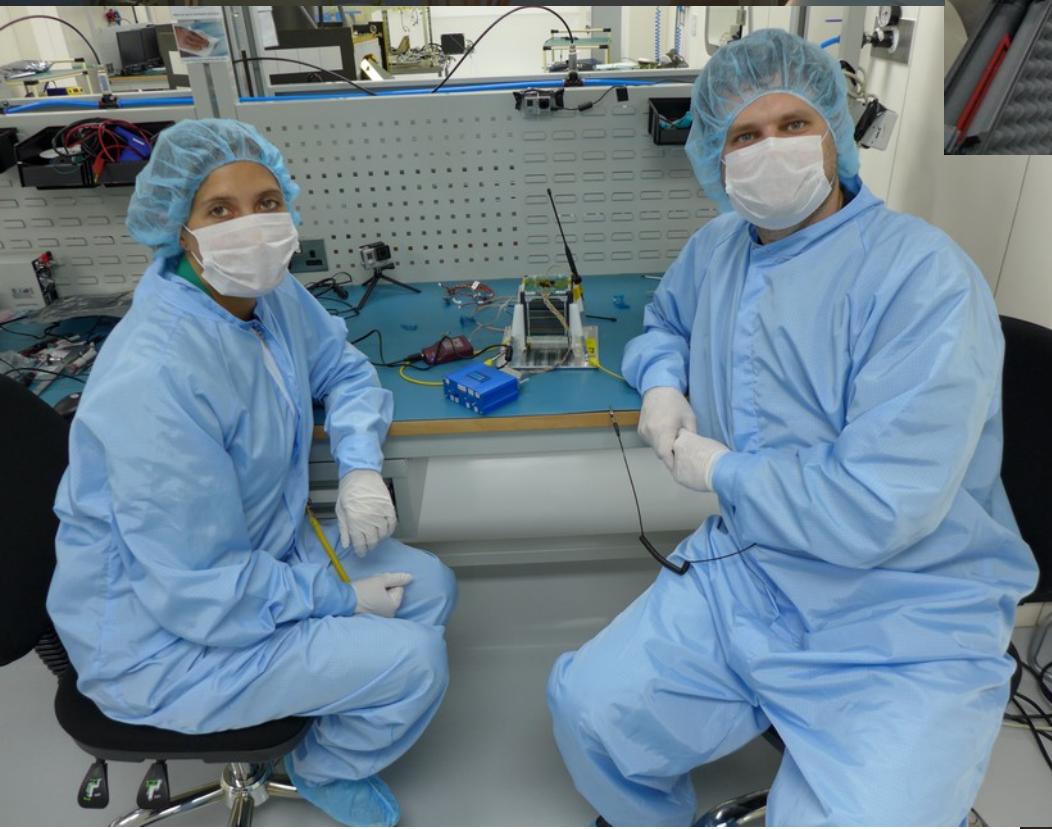
Nog meer.....

Testen...



AMSAT-NL
Radio Amateur Satellites







Huidige status

Klaar voor flight

- Vacuum testen
- Thermische testen
- Vibratie testen
- Schok analyse
- elektrische testen
- Software testen



Klaar voor flight

Lancering op een SpaceX Falcon 9

Samen met nog meer andere satellieten

Ook amateur satellieten (AMSAT FOX)



Thanks for your attention!

Any questions?

Wouter Weggelaar: pa3weg@amsat.org

FUNcube websites: <http://funcube.org.uk>
and <http://funcubedongle.com>

AMSAT-UK website: <http://amsat-uk.org>

AMSAT-NL website: <http://amsat-nl.org>