

# OBCSW sub-team

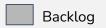
Mid-semester Meeting Presentation



#### Done

(\*): critical to the

integration schedule



Planned, In Progress & Completed tasks/subtasks

## xperiment tasks

- Nanoprop(\*):
  - Read gyro values
  - Manual abort
  - Abort based on gyro readings
  - Delays for Nanoprop API
  - FDIR review
  - uint8 datatype fix
  - FDIR test methods
  - TM/TC
  - HK
  - Testing NanoProp & gyro code on simulators
  - NanoProp automatic heater usage for the thermal tests
- SEUD/Camera(\*):
  - Rebase the old SEUD branch
  - Apply the changes of the students from the old project course
  - Update simulator code
  - Write unit tests
- Unit test coverage report generation for the OBCSW code Elveti real time HK visualization
- Add more TM queues
- LEGS & CUBES tests(\*)
  - Collaboration on CUBES integration with Thedi
- Initialization phase FDIR(\*):
  - Automatic I2C speed adjustments
- Add new TM sources in accordance with M154\_035(\*):
  - Add parts of the ADCS library HK to the basic HK beacon

- Add/remove exectime for TCs
- Define authenticated/troubleshooting **TCs**
- Separate HK interval for realtime/stored
- TM\_S160\_ADCS\_LIB\_HK to realtime HK
- Be less dependent on SD card(\*)
  - Strange macro TC bug (manual memory allocation/bit rotate bug)
- Elveti module improvements

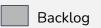
#### Misc:

- Integration of MIB repo into **OBCSW** repo
- Open sourcing OBCSW repo
- Onboarding of new students after the mid-semester meeting
- General improvements to the build process









## Planned, In Progress & Completed tasks/subtasks

- In Progress (\*): critical to the integration schedule
- Experiment tasks
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Misc:

 General improvements to the build process



## Status updates regarding the experiments

- SEUD:
  - Received a draft report from the students
  - Requested small changes regarding MSP addressing
  - Next steps: Refactoring of SEUD interface code based on the student's report
- CUBES:
  - Thedi & William are in close cooperation, work in progress
- Nanoprop:
  - Ozan is working on refactoring and integrating Niklas' code into the OBCSW



### Commits added since end-of-semester meeting

- 071e424 feat: reset bootcount as the last thing in the initialization task
- f4631c9 Add git hooks for generating version file
- 0684279 Make CUBES TC scripts more human-friendly
- 6d10617 More misc fixes
- ccf256e Lower I2C clock frequency to 100 kHz
- ce7b8f3 Misc FT command fixes
- ef88d80 Remove XTEST
- 3376c73 Shrink docker images and publish them to docker hub
- a563455 Fix setup.sh

- 5264d99 Resolve "Misc issues encountered during office day"
- c324fc8 Add git instructions for building the MCS files
- 5dc71f2 fix: minor bug fixes related to docker files
- db9a632 Reduce error log spam and increase fault tolerance
- fb35e30 Persistent storage for Arduino sims in Ftcmd/OBCSW S-I-L mode



