

RPW LFR Flight software update

Progress meeting, 10/02/2021.

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What is done

- SGSE rewrite (12/2020 → 01/2021)
 - Update to MK2+ SPW bricks (MK1 not anymore supported)
 - SW stack update (switch to more maintainable impl)
- FSW update
 - Some refactoring in SM handling
 - Build system migration to ease native unit tests

What has to be done

- SGSE rewrite (P1)
 - Port all plugins from previous impl (~10 person-day)
 - Port all scripts from previous impl (~10 person-day)
 - New tests scenario impl (~10 person-day)
- FSW update (P0)
 - Implement SM calibration feature (~10 person-day)
 - Measure CPU usage
 - Optimization (if needed) (~10 person-day)
 - Implement fallback solution (worst case) (~15 person-day)

Conclusion

- FSW is not ready yet
- Delivery on June 30 is highly optimistic
- First testable FSW is expected in the next 2 weeks
- If FSW optimizations are needed (likely) we have to be more careful with tests/regressions
- Do we have any feedback on RCC 1.3 (RTEMS5+GCC10)?