DraftWATCHMAN DAQ WG Pre-Meeting

Hawaii Jan 2019

Charges:

- 1. Determine milestones and deliverables, and their schedule, for all proposed DAQ systems leading up to CDR and PDR. (See below for brief description of CDR & PDR.)
- 2. Decide on suite of performance tests to be performed on all systems. Establish performance criteria. Define assumed waveform compression factors.
- 3. Produce initial block diagrams of each proposed DAQ system.
- 4. Define boundaries of system for cost comparison purposes.

8:00-9:30	System Status Reports	
8:00-8:30	CAEN	Tyler A./Penn State
8:30-9:00	ANNIE/K0TO	TBD/U. Iowa
9:00-9:30	TARGET	TBD/U. Hawaii
9:30-10:00	Coffee break	
10:00-3:00	Preparation for CDR and PDR	
10:00-10:15	Purpose of CDR/PDR	Doug
10:15-10:45	CDR: known system risks, challenges	All; Note taker:
10:45-12:00	PDR: Common and specific performance milestones & schedule; re-evaluate requirements	All; Note taker:
12:00-1:00	Lunch break	
1:00-1:30	PDR: Test procedures, performance criteria	All; Note taker:
1:30-1:45	PDR: System bandwidths (define assumed compression factors)	All; Note taker:
1:45-2:00	PDR: Cost estimation (define DAQ HW boundary)	All; Note taker:
2:00-2:30	Interfaces of DAQ with other systems	
2:30-3:00	Coffee break	
3:00-4:00	Interfaces (jointly with HV, REBAM, Site)	

System status reports should include

• system block diagram

CDR:

- Demonstrate that our concept for the DAQ will meet mission requirements.
- List and describe interfaces (with HV, REBAM, HVAC,...)
- List requirements, showing how they flow from upper level requirements
- Describe our three candidate systems. Explain how each maps against requirements. Explain downselect criteria and process.

PDR:

- Implement downselect
- Present final system design
- Show that final system design satisfies requirements
- Demonstrate functionality of final system design
- Tighten up interfaces