

Status Letter

Week 6 - 3/1/15

LFEV

Team Milestones:

VSCADA:

Last week:

Week 4 tasks

User Manual Submitted

Submit Purchase Request for Computer, CAN Devices & Display

Week 5 tasks

System Logging Daemon

A custom 'syslog' message logging program running as a system daemon is created along with a demonstration program capable of sending warnings and events of varying priority level.

Client-Server Real Time Communication

The client is capable of monitoring and displaying data generated on the server in real time.

Week 6 tasks

CAN Communication Library

A library is delivered capable of interfacing with basic digital, serial and analog sensors via a custom CAN protocol. A demonstration is delivered demonstrating proper functionality of the software.

This week:

Week 5 tasks

Maintenance Manual Working Draft Submitted

The first draft was submitted in week 3. Will rewrite and review with the faculties.

RRDTool Demonstration

A simple 'hello world' RRDTool application is running on the virtual machine (done last week).

This application will be graphing simulated real time sensor data (to be done this week).

Week 6 tasks

Will do (descriptions of the tasks are in the team schedule):

Motor Controller Communication Library

Microcontroller CAN Firmware

Embedded Linux Installation (VAB-820)

Acceptance Test Plan Submitted

Will not do this week:

PACMAN Communication Library

A library will be created but no demonstration can be delivered.

DYNO:

Last week the milestones for the Dyno team was to design a computer controllable throttle input to the motor controller and have the motor controller programmed. Both of these milestones were reached.

Next week the milestones for the Dyno team are to integrate the two data acquisition systems such that their output is available in one file. The other milestone is to integrate the computer controllable throttle input to the motor controller.

Task	Member	Status
Submit Calibration and Error Analysis Document	Steve	Complete
Submit ATP final draft	Alex	Complete
Design computer controllable throttle input to motor controller	John	Complete
Model the motor in software	Brendan	Complete
Program and control the motor controller via software	Nate	Complete
Revise the work breakdown schedule	Steve	Complete

TSV:

Last week, we put in orders for the PacMan computers, the LCD screens, and we are ready to order the AMS boards. We completed several of the requirements for the upcoming CDR, as well as the maintainability plan.

For next week, we plan to finish the BoB revisions and have it ready to be fabricated, have the ATP approved and finish our CDR documents.

Begin CDR, finish AMS redesign	2/23/2015	3/2/2015	TEAM	MET
Correct BoB board errata	2/9/2015	3/2/2015	Katie	Y
AIR failure sensor for main fuse design	2/16/2015	3/2/2015	Jordan	
Fix AMS board layout errata, ready for fab	2/23/2015	3/2/2015	Jordan	Y
Put in order for AMS, LCD and computers	2/23/2015	3/2/2015	Jaejoon	Y
Updated system design	2/23/2015	3/2/2015	Katie	Y
Detailed specifications for each subsystem type	2/23/2015	3/2/2015	Katie	Y
Enhanced requirements analysis	2/23/2015	3/2/2015	Billy	Y
User interface demonstrations	2/23/2015	3/2/2015	Hansen	Y
Hardware interface control specifications	2/23/2015	3/2/2015	Jordan	
A revised program schedule that documents progress	2/23/2015	3/2/2015	Billy	Y
Maintainability plan (not part of CDR)	2/23/2015	3/2/2015	Hansen	Y
Communicate new TSV plan with MechEs	2/23/2015	3/2/2015	Jaejoon	Y
Finish redesign, CDR	3/2/2015	3/9/2015	TEAM	MET
Fabrication specifications for all subsystems	3/2/2015	3/9/2015	Hansen	

A system state demonstration w/ software demo	3/2/2015	3/9/2015	Jordan	
Finish BoB revisions for fabrication (contingent on following task)	3/2/2015	3/9/2015	Katie	
Update BoB with new charging structure	3/2/2015	3/9/2015	Jordan	
Acceptance Test Plan (ATP) approved	3/2/2015	3/9/2015	Hansen	
A final revised cost analysis and detailed program budget	3/2/2015	3/9/2015	Jaejoon	
Fusing for BoB	3/2/2015	3/9/2015	Jaejoon	
Aggregate CDR documents into report	3/2/2015	3/9/2015	Billy	
Hardware interface control specifications	3/2/2015	3/9/2015	Billy	

GLV:

Last week the GLV team was able to sketch out almost all components of the system. We were not however able to get all circuit sketches within the TSI submitted for approval. This has been completed over the weekend and will be submitted Monday. This also goes for the circuits within the GLV Power system. Purchase of the GLV battery and charger is held back because circuit approval is held back.

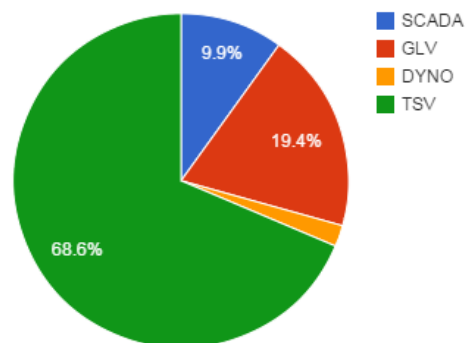
Next week the team plans on assembling most of the documentation for the CDR including final ATP. Specifically we wish to submit our first piece for fab. Box drawing will be completed for the GLV Battery Panel, VCI, and GLV Hub

Outstanding Action items:

Budget:

Total Money	5000
Total Requested	7202.43
Remaining Money	-2202.43

Cost Breakdown



Thermistor
IC MCU 8BIT 16KB FLASH 32TQFP
SMT ADAPTERS 3 PACK 32QFN/TQFP
CRYSTAL 16MHZ 20PF
Digital ISO 2.5kv 2ch CAN
Te-Connectivity 2 pin/1 row parallel
Te-Connectivity 2 pin/1 row free
Te-Connectivity 3 pin/1 row parallel
Te-Connectivity 3 pin/1 row free
Te-Connectivity 8 pin/2 row parallel
Te-Connectivity 8 pin/2 row parallel
Te-Connectivity pin
PVC Tubing, 1/2" ID, 11/16" OD, 3/32" Wall Thickness, 10 ft. Length
Barbed Tube Fitting, Reducing Straight for 3/4" x 1/2" Tube ID 10 pack
Panel Drain, Line 3, Grey
Panel Source, Neutral, Blue
I2C/TWI LCD2004 Module