

# LFEV Status Letter

Week 7 - 3/7/15

LFEV

## Team Milestones:

### VSCADA:

**Week 5 tasks:**

**incomplete:**

Client-Server Real Time Communication

**Week 6 tasks:**

**Completed:**

Acceptance Test Plan Submitted

CAN Communication Library

Motor Controller Communication Library

**Incomplete:**

PACMAN Communication Library

Microcontroller CAN Firmware

Embedded Linux Installation (VAB-820)

### DYNO:

Last week the milestones for the Dyno team were 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.

Next week the milestones are to present CDR, submit hardware purchase proposal, and demonstrate data acquisition from the motor controller and dynamometer.

Task	Member	Status
Submit memo on Dyno to VSCADA interface	Steve	Complete
E-stop and oil temp. sensor design	Alex	Complete
Integrate computer controlled throttle with motor controller	John	Complete
Demonstrate User interface for computer controlled throttle	John	Complete
Simulate and document the motor model	Brendan	Complete
Integrate data from motor controller and dynamometer to one file	Nate	Incomplete

### TSV:

Last week, the BoB schematic was finished in DxDesigner, the AMS boards were ordered from 4pcb.com and a pack wiring diagram was completed for inclusion in the overall ICD.

This week, we will prepare our CDR and presentation as well as conclude ordering and demonstrate the PacMan-VSCADA communication interface.

Task Name	Date Assigned	Due Date	Assignee	Met
Hardware interface control specifications (pack wiring diagram)	2/23/2015	3/2/2015	Billy	Y
<b>Finish BoB revisions for fabrication</b>	<b>3/2/2015</b>	<b>3/9/2015</b>	<b>Katie</b>	Y
Acceptance Test Plan (ATP) approved	3/2/2015	3/9/2015	Hansen	
Updated Maintainability Plan	3/2/2015	3/9/2015	Hansen	Y
Fusing for BoB	3/2/2015	3/9/2015	Jaejoon	Y
A system state diagram revision	3/2/2015	3/9/2015	Jordan	Y
20V indicator	2/23/2015	3/2/2015	Jaejoon	
AIR failure sensor	2/23/2015	3/2/2015	Jordan	N/A
System Reset Design	2/23/2015	3/2/2015	Katie	Y

## GLV:

### Last Week:

The GLV batteries were selected. Components will be purchased on Monday/ Tuesday. The battery drawings were not completed. This task has now been reassigned to Zach for completion in the upcoming week.

The VCI Panel Drawings were not completed due to major design changes. Sketches will be approved Monday and drawings will be made in the upcoming week.

The internal layout of the TSI was sketched, and will be approved on Monday. The BOM was not completed due to circuit changes. To be completed this week.

Approval of the GLV Hub design was delayed and it will occur this week. Purchase of components also delayed

Cockpit Panel safety circuit DxDesigner Created. Continuing to work of formal schematic in the upcoming week.

The Side panel was approved, but submission for fab delayed because of its lack of priority. Fab to occur after other key components are constructed.

### This Week:

Focus will primarily be on CDR. Sketch/design approval for all major circuits and components will be completed. Panel Drawings will be constructed for the VCI, TSI, GLV Power, and Cockpit Panel. Purchasing of all components will be completed on Monday, Tuesday, and Thursday.

## Budget:

(including outstanding items)

<b>Team</b>	<b>Money Spent</b>	<b>Budgeted Money Remaining</b>
<b>Dyno</b>	<b>\$43.66 (\$192.05)</b>	<b>\$104.34 (-\$44.05)</b>
<b>VSCADA</b>	<b>\$304.26</b>	<b>\$410.74</b>
<b>GLV</b>	<b>\$10.24</b>	<b>\$1387.66</b>
<b>TSV</b>	<b>\$745.04</b>	<b>\$1994</b>
<b>Total</b>	<b>\$1103.20 (\$1251.59)</b>	<b>\$3896.74</b>

## Outstanding item orders:

### Dyno:

PVC Tubing, 1/2" ID, 1 1/16" 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
30" 2/0 lug to lug cable - red
37 pin connector