Project Status Letter Week 8
Covering Period from 10/14/2018 to 10/21/2018
Prepared by Alex Kmetz and Katie Lee

DYNO Integration Action Tracking

Task / Item	Unattempted	In Progress Projected (%)	In Progress Actual (%)	Complete	Dependencies
Motor Spinning in Dyno Room		0%	0%	No	Motor Purchased Motor Controller Purchased Pulley / Shaft Fabricated Motor Installed in Motor Mount MCS Installed in Fixture Pulley / Shaft Connected to Motor
Motor Purchased		0%	0%	No	
Motor Controller Purchased		0%	0%	No	
Motor Controller Connected to TSI, Cooling, and Motor in Dyno Room		0%	0%	No	Motor Controller Purchased MCS / TSI / Cooling Fixture Fabricated TSI Board Complete TSI Mounting Plate Complete
Motor Mount Fabricated		0%	0%	No	
Motor Installed in Motor Mount in Dyno Room		0%	0%	No	Motor Purchased Motor Mount Fabricated
Pulley / Shaft Fabricated		0%	0%	No	
Pulley / Shaft Connected to Motor and Mounted in Dyno Room		0%	0%	No	Motor Purchased Pulley / Shaft Fabricated
MCS / TSI / Cooling Fixture Fabricated		0%	0%	No	
Pedal Cluster Fabricated		0%	0%	No	
Dyno Room Testing Plan Complete		100%	0%	No	
Dyno Room Wiring Diagram Complete		100%	0%	No	
GLV Board Manufactured		42.86%	14.29%	No	
GLV Mounting Plate Manufactured		66.67%	33.33%	No	
Safety Loop Testing Panel Mounted in Dyno Room Rack		50%	0%	No	
Safety Loop Functional In Dyno Room		0%	0%	No	GLV Board Manufactured
TSI Board Manufactured		30.77%	7.69%	No	
TSI Mounting Plate Manufactured		33.33%	0%	No	
TSI Throttle / Brake Control Panel Manufactured		50.00%	12.50%	No	TSI Board Manufactured TSI Mounting Plate Manufactured
Cooling Loop Filled with Water and Tested For Leaks		66.67%	66.67%	No	
Cooling System Mounted on Fixture in Dyno Room		0%	0%	No	MCS / TSI / Cooling Fixture Fabricated
Cooling System Connected to MCS and Motor in Dyno Room		0%	0%	No	MCS / TSI / Cooling Fixture Fabricated

Cooling System Connected to TSI in Dyno Room		0%	0%	No	MCS / TSI / Cooling Fixture Fabricated
TSV Packs Manufactured		20%	0%	No	
TSV Packs Connected to Motor Controller in Dyno Room		0%	0%	No	
TSV PackMan Boards Fabricated		25%	0%	No	
TSV CellMen Boards Fabricated		11%	11%	No	
TSV ChargeMan Boards Fabricated		0%	0%	No	
TSV Powering Motor via Motor Controller		0%	0%	No	TSV Packs Manufactured PackMan Boards Fabricated CellMen Boards Fabricated ChargeMen Boards Fabricated Motor Controller Purchased Motor Purchased
SCADA Recording Data and Writing to a File		37.50%	25%	No	
SCADA Displaying Data to Rack Monitor in Dyno Room		50%	50%	No	
SCADA Communicating with GLV in Dyno Room		0%	0%	No	GLV Board and Mounting Plate Integrated
SCADA Communicating with TSI in Dyno Room		0%	0%	No	TSI Board and Mounting Plate Integrated
SCADA Communicating with TSV in Dyno Room		0%	0%	No	TSV Packs Manufactured PackMan Boards Fabricated CellMen Boards Fabricated ChargeMen Boards Fabricated
SCADA Communicating with Motor Controller in Dyno Room		0%	0%	No	
All Connecting Wires Produced with Correct Connector Types		0%	0%	No	
All Subsystems fully wired in Dyno Room		0%	0%	No	Dyno Room Wiring Diagram Complete
All Tests According to Test Plan Run in Dyno Room		0%	0%	No	Dyno Room Testing Plan Complete

For more data, visit website using link below:
https://sites.lafayette.edu/motorsports/files/2018/10/Week_8_DYNO_Progress.pdf

Project Item Completion Chart:

Team	Tasks Completed	Tasks Planned for Next Week	Proposed Changes	Overdue WBS Items
VSCADA	**Sam:** SCADA.1.5 - Delivered Dummy Sensor Data to Database SCADA.2.5 - Communication Protocols Delivered SCADA.2.4 - Raw and Calibrated Data Written to File SCADA.5.3 - Demo of Receiving Raw Data and Writing to a File SCADA.5.5 - Demo of System Reaction to Data **Zian**: SCADA.2.4 - Raw and Calibrated Data Written to File SCADA.3.6 - Demo of Sleep Mode SCADA.4.4 - Demo of Back Display SCADA.4.5 - Demo of UI Displaying Receiving Data	**Sam:** SCADA.5.1 - Demo of Transitions between Vehicle States **Zian:** SCADA.2.7 - SCADA Testing Plan Delivered **Yuqiu:** SCADA.3.7 - Demo of SCADA Interacting with Subsystems	none	
DYNO	none	**Alex:** DYNO.1.1 - DYNO Wiring Diagram **Drew**: DYNO.1.1 - DYNO Wiring Diagram **Hayden:**	none	**Alex:** DYNO.1.1 - DYNO Wiring Diagram

		DYNO.3.1 - Testing Plan Delivered		
GLV	**Max:** GLV.2.1 - Overall GLV Block Diagram Complete GLV.2.2 - GLV BreakOut Board (BoB) Circuit Schematic Delivered	**Max:** GLV.2.3 - GLV PCB Layout Delivered GLV.2.4 - GLV Board BOM Approved GLV.2.5 - GLV PCB Ordered and Delivered GLV.5.1 - Block Diagram Delivered GLV.7.4 - Pi2CAN GPIO Board BOM Delivered GLV.7.5 - Pi2CAN GPIO Board PCB Ordered and Delivered **Robson:** GLV.4.1 - Block Diagram of Side Panels Delivered GLV.4.2 - Left Side Panel BRB Installed and Tested GLV.4.3 - Left Side Panel Safety Loop Integration GLV.4.4 - Right Side Panel BRB Installed and Tested GLV.4.5 - Right Side Panel and MReset Installed and Tested GLV.4.6 - Right Side Panel GLVMS Installed and Tested GLV.4.7 - Right Side Panel	none	**Max:** GLV.2.3 - GLV PCB Layout Delivered GLV.2.4 - GLV Board BOM Approved GLV.2.5 - GLV PCB Ordered and Delivered GLV.5.1 - Block Diagram Delivered GLV.7.4 - Pi2CAN GPIO Board BOM Delivered GLV.7.5 - Pi2CAN GPIO Board PCB Ordered and Delivered GLV.8.1 - GLV BoB Mount Block Diagram Delivered GLV.8.2 - GLV BoB Mount Schematic Delivered **Robson**: GLV.4.1 - Block Diagram of Side Panels Delivered GLV.4.2 - Left Side Panel BRB Installed and Tested GLV.4.3 - Left Side Panel Safety Loop Integration

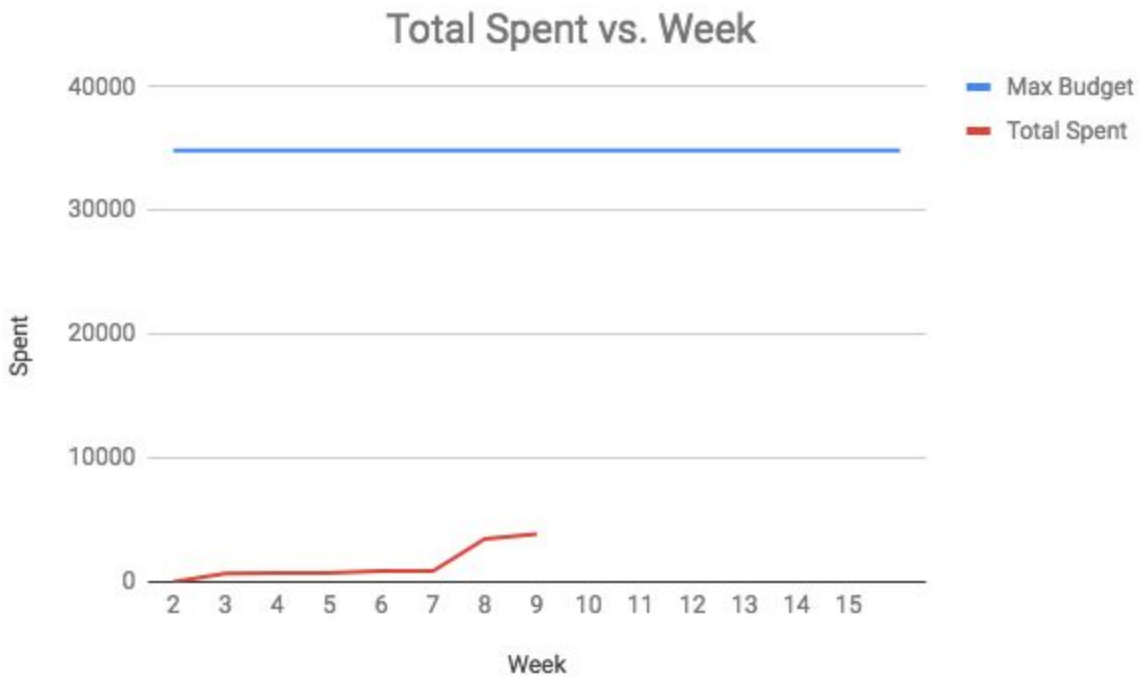
		TSMS Installed and Tested GLV.4.8 - Right Side Panel Safety Loop Integration		
TSI	**Tianyu**: TSI.2.2 - TSI Circuit Schematic Delivered and Approved **Antonio**: TSI.5.2 - MCS Integration Testing Plan Delivered and Approved TSI Test Panel Repaired and Parts Ordered (Non-WBS Item) Updated Plausibility Circuit to 6-bit Output instead of 1-bit (Non-WBS Item) **Hongbo**: TSI.4.3 - Firmware Testing Board Delivered **Yuqiu**: TSI.4.3 - Firmware Testing Board Delivered TSI.4.4 - Firmware I/O Functionality Delivered **Xiaonan** TSI.2.2 - TSI Circuit Schematic Delivered and Approved TSI.8.3 - Demonstration of Previous TSI Errata Incorporation	**Tianyu:** TSI.1.1 - Mechanical Drawing of TSI Enclosure Delivered and Approved TSI.2.3 - TSI PCB Layout Delivered and Approved **Antonio**: Complete TSI Test Panel and Aid in TSI Board completion (Non-WBS Items) **Hongbo**: TSI.4.4 - Firmware I/O Functionality Delivered TSI.4.8 - VSCADA Communication CAN Bus Communication Complete TSI.4.2 - Firmware Bugs Discovered and Fixed **Yuqiu:** TSI.2.3 - TSI PCB Layout Delivered and Approved TSI.4.5 - Firmware Logic / State Machine Delivered and Approved	none	**Tianyu:** TSI.1.1 - Mechanical Drawing of TSI Enclosure Delivered and Approved **Hongbo**: TSI.4.8 - VSCADA Communication CAN Bus Communication Complete TSI.4.2 - Firmware Bugs Discovered and Fixed **Katie:** TSI.2.3 - TSI PCB Layout Delivered and Approved

		TSI.4.8 - VSCADA Communication with CAN Bus Complete **Xiaonan:** TSI.2.3 - TSI Circuit Layout Delivered and Approved		
TSV	**Yishak**: TSV.3.1 - CellMan Block Diagram Submitted and Accepted	**Hayden:** TSV.1.2 - Pack Mechanical Drawing Submitted and Accepted TSV.4.1 - PackMan Block Diagram Delivered and Approved TSV.4.2 - PackMan Circuit Schematic Submitted and Accepted **Yishak:** TSV.1.1 - High Level Block Diagram of the Packs TSV.3.4 - CellMan Component Purchases **Weston:** TSV.7.1 - Cell Balancing Pseudo Code Delivered **Alex:** TSV.4.1 - PackMan Block Diagram Delivered	none	**Alex:** TSV.4.1 - PackMan Block Diagram Delivered **Hayden:** TSV.4.1 - PackMan Block Diagram Delivered and Approved TSV.4.2 - PackMan Circuit Schematic Submitted and Accepted
Cooling	none	none	none	none
Interconnect	**Drew:** INTER.1.8 - Wiring Diagram Printed and Posted in AEC 134	**Drew**: DYNO Wiring Diagram	none	none

	INTER.6.1 - Wire Tester Block Diagram Submitted and Approved INTER.6.2 - Wire Tester Circuit Schematic Submitted and Approved **Weston:** INTER.1.5 - Cable Organization Plan Submitted and Approved			
Management	**Katie:** Created new WBS better emphasizing DYNO Integration goals	**Katie:** M.7.3 - SAE ESF-1 Delivered TSI.2.3 - TSI PCB Layout Delivered and Approved **Alex:** M.7.1 - SAE Project Management Plan Submitted	-Modify the WBS to better reflect the goals of integration rather than individual completion	**Katie:** M.7.3 - SAE ESF-1 Delivered **Alex:** M.7.1 - SAE Project Management Plan Submitted

Purchasing Summary from Previous Week:

Sub-system	Allocated Budget	Total Spent	Budget Remaining	Percentage Spent
Brakes	3500	0	3500	0.00%
Chassis/Body	5000	0	5000	0.00%
Cooling	620	0	620	0.00%
GLV	780	246.23	533.77	31.57%
Interconnect	1500	162.85	1337.15	10.86%
Motor	4000	0	4000	0.00%
Pedal/Controls	2000	0	2000	0.00%
Steering	2500	0	2500	0.00%
Suspension	2200	0	2200	0.00%
TSI/MCS	1500	283.25	1216.75	18.88%
TSV	4187	792.55	3394.45	18.93%
VSCADA / DYNO	525	0	525	0.00%
Shipping/Tax	4246.8	98.67	4148.13	2.32%
Registration	2300	2300	0	100.00%
Overall	34858.8	3883.55	30975.25	11.14%



Purchase Orders:

DATE:10/16/2018

ECE Department Material Request

Course:	ECE 491
Professor:	Nadovich

Req Number:	10

Requested By	
Name	Maxwell Mcfarlane
Email	mcfarlmt@lafayette.edu
Phone	8487026146

Vendor:	Amazon
Web Site	amazon.com
Phone	(888) 280-4331
Ship By:	

#	Quantity	Vendor Part	Description	Unit Price	Total Price	Rcvd
1	1	B01K9X1ZCE	Tractive System Energized Light	$30.00	$30.00	

Shipping Fees	$0.00
Grand Total:	$30.00

Instructor Approval: APPROVED BY PROF. NADOVICH

Department Approval: _____
(Over $500)

DATE:10/17/2018

ECE Department Material Request

Course:	ECE 491
Professor:	Nadovich

Req Number:	11

Requested By	
Name	Maxwell Mcfarlane
Email	mcfarlmt@lafayette.edu
Phone	8487026146

Vendor:	Allied
Web Site	alliedelec.com
Phone	(866) 433-5722
Ship By:	Ground

#	Quantity	Vendor Part	Description	Unit Price	Total Price	Rcvd
1	3	70172680	22MMHW SeriesEmergency Stop Switches	$55.52	$166.56	

Shipping Fees	$0.00
Grand Total:	$166.56

Instructor Approval: APPROVED BY PROF. NADOVICH

Department Approval:
(Over $500)

DATE:10/16/2018

ECE Department Material Request

Course:	ECE 491
Professor:	Nadovich

Req Number:	12

Requested By	
Name	Maxwell Mcfarlane
Email	mcfarlmt@lafayette.edu
Phone	8487026146

Vendor:	Deal Extreme
Web Site	dx.com
Phone	(866) 433-5722
Ship By:	Ground

#	Quantity	Vendor Part	Description	Unit Price	Total Price	Rcvd
1	2	22003	Car Rotating Battery/Electrical Master Switch	$7.83	$15.66	

Shipping Fees	$0.00
Grand Total:	$15.66

Instructor Approval: APPROVED BY PROF. NADOVICH

Department Approval:
(Over $500)

DATE:10/16/2018

ECE Department Material Request

Course:	ECE 491
Professor:	Nadovich

Req Number: 13

Requested By	
Name	Maxwell Mcfarlane
Email	mcfarlmt@lafayette.edu
Phone	8487026146

Vendor:	Superbrightleds
Web Site	superbrightleds.com
Phone	(866) 433-5722
Ship By:	Ground

#	Quantity	Vendor Part	Description	Unit Price	Total Price	Rcvd
1	3	MDB-A12	Rectangular LED Lights Amber/SSOK	$6.49	$19.47	

Shipping Fees	$0.00
Grand Total:	$19.47

Instructor Approval: APPROVED BY PROF. NADOVICH

Department Approval:
(Over $500)

DATE:10/17/18

ECE Department Material Request

Course:	ECE 491
Professor:	Nadovich

Req Number: 14

Requested By	
Name	Drew Carleton
Email	carletod@lafayette.edu
Phone	858-605-8410

Vendor:
Web Site: wirecare.com
Phone: (973) 300-9782
Ship By: Ground

#	Quantity	Vendor Part	Description	Unit Price	Total Price	Rcvd
1	100	**https://bit.ly/2COF0bs**	solid contact size 16 socket	$0.34	$34.00	
2	100	**https://bit.ly/2Es72ep**	solid contact size 16 pin	$0.32	$32.00	
3	25	**https://bit.ly/2pV9XlJ**	4 cavity plug	$0.99	$24.75	
4	10	https://bit.ly/2CNPuIa	4 cavity receptical	$1.03	$10.30	
5	50	**https://bit.ly/2yDYPxq**	receptical wedgelock	$0.12	$6.00	
6	10	**https://bit.ly/2PDHCM5**	4 cavity receptical with flange	$4.88	$48.80	
7	50	**https://bit.ly/2ynPUks**	plug wedge lock	$0.14	$7.00	

Shipping Fees	$0.00
Grand Total:	$162.85

Instructor Approval: APPROVED BY PROF. NADOVICH

Department Approval:
(Over $500)

2018-19 PURCHASE REQUEST FORM

Class/Project Name:	**FSAE-Racecar**
Account #:	
Advisor Approval:	**Nesbit/Nadovich/Nestor**

Vendor Order Information

Date:	10/17/2018	**Web/email address:**	https://www.mcmaster.com/		
Vendor Name:	McMaster-Carr				
Address:	200 New Canton Way				
City:	Robbinsville	**State:**	NJ	**Zip Code:**	8691
Telephone:	609-689-3000	**Fax:**	609-259-3575		

ORDER INFORMATION

#	Qty	Unit	Part #	Description	Unit Price	Price
1	1	Pack	90272A096	**Steel Pan Head Phillips Screws, 3-48 Thread, 1/2" Long**	$8.00	$8.00
2	1	Pack	94639A470	**Off-White Nylon Unthreaded Spacer, 3/16" OD, 5/32" Long, #4 Screw Size**	$3.62	$3.62
3	1	Pack	90272A192	**Steel Phillips Screws 8-32, 3/8'' Long**	$2.92	$2.92
Total						$14.54