



**FIRST Robotic Competition
Zero Gravity - Team 2180
2009 Season**

January 24th, 2008



Season at a Glance



Winter – Hit the ground running!

- ü Attend the Kickoff on January 3rd, 2009
- ü Brainstorm
- ü Design, Build & Test a robot
- q Ship our robot
- q Make travel arrangements
- q Submit for awards
- q Apply for scholarships
- q Collect “Consent and Release” forms
- q Compete in events



Meeting Agenda



January 24th Topics:

- q Review AI's
- q Review Schedule
- q Sub-Teams Status
- q Preliminary Design Review of Mechanical, Electrical, Software Designs



Open Action Items



Zero Gravity - FRC Action Item Tracking System					
AI No.	Action	Team	Assigned	Open Date	Due Date
004	Complete Design Tool Recommendations	All	Mentors	11\24\08	12/15/08
006	Return drivers for USB-6008 DAQ CD	Software	Brazinski	12\08\09	1\01\09
009	Complete Electrical, Mechanical, Pneumatic Wish List	All	All	11\24\08	12/15/08
010	Buy Field Mockup Parts	Field Mockup	Willert	01/12/09	01/17/09
011	Purchase Additional Control System	SHRPA	Breingan	01/12/09	01/17/09
012	Finalize Offsite Meeting site	SHRPA	Kohler	01/03/09	01/19/09
014	Return LabVIEW DVD (Set#2)	Software	Mundt	01/17/09	01/24/09
015	Order Spare Jaguars	SHRPA	Breingan	01/17/09	01/31/09
016	Order Rover Wheels	SHRPA	Breingan	01/17/09	01/31/09
017	Start Weight Budget Spreadsheet			01/17/09	01/31/09
018	Start Cost BOM for FRC Inspection			01/17/09	01/31/09
021	Build Competition Operator Console	Mechanical	Tom C	01/17/09	01/31/09
022	Locate Sponsorship \$ Level Letter	SHRPA	Colleen C	01/17/09	02/17/09



Scheduled - Week 1



Task	Week 1 (1/10/09)							Week 2 (1/17/09)							Week 3 (1/24/09)							
	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S	
Place Order: Sm. Parts & Add. Hardware	C																					
Brainstorm on all possible Robots/Tactics	X	X	C																			
Proto Half Scale Robots				X	X	X	X	X	X	X	X	X	C									
Field Construction					X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X		
Decide on Robot Concept							X	X	X	X	X	X	C									
X = Progress C = Completed	Good							Caution							Behind Schedule							Task Start/Stop



Scheduled - Week 2/3



Task	Week 1 (1/10/09)							Week 2 (1/17/09)							Week 3 (1/24/09)						
	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S
Decide on Robot Concept							X	X	X	X	X	X	C								
Electrical - Power & Control System																					
Concept Design													X	X	X	X	X	X	X	X	X
Fab prototype																					
Fab Final System																					
Programming - Autonomous Mode																					
Concept Design																					X
Fab prototype																					X
Fab Final System																					
Programming - Drive & Scoring System																					
Concept Design								X	X	X	X	X	X	X	X	X	X	X	X	X	X
Fab prototype										X	X	X	X	X	X	X	X	X	X	X	X
Fab Final System																					



Scheduled - Week 2/3



Task	Week 1 (1/10/09)							Week 2 (1/17/09)							Week 3 (1/24/09)						
	M	T	W	T	F	S	S	M	T	W	T	F	S	S	M	T	W	T	F	S	S
Mechanical - Drive Train																					
Concept Design								X	X	X	X	X	X	X	X	X	X	X	X	X	
Fab Crude Proto to test power/speed																					
Fab Final Drive																					
Mechanical - Chassis																					
Concept Design										X	X	X	C								
CAD modeling of all systems													X	X	X	X	X	X	X	X	X
Fab Chassis													X	X	X	X	X	X	X	X	X
Mechanical - Integrate Drive/Chassis																					
Scoring System																					
Concept Design								X	X	X	X	X	C								
Fab prototype																					
Fab Final System																					
Integrate proto systems as needed																					
Integrate Final Systems																					
Test & Drive & Upgrade & Test & Test																					
Prepare shipping crates							C														
Ship Robot																					
X = Progress C = Completed																					
	Good	Caution	Behind Schedule	Task Start/Stop																	



Sub Team Status



- Game Field Mockups (Tom Willert)
- System / Design (Bryan Rich)
- Mechanical (Brandon Rich)
- Electrical (Pat Callan)
- Programming (Ben McIntyre)
- Scoring (Sys/Mech Leads)
- Drivers
- PR / Team Spirit (Stephanie Moon)



Review Concept Designs



- System / Design (Bryan Rich)
 - Drive Train Design Requirements?
 - Autonomous Design Requirements?
 - TeleOp Design Requirements?
 - Sensor Design Requirements?
 - Scoring System Design Requirements?
 - FIRST Design Requirements?
- Mechanical (Brandon Rich)
- Electrical (Pat Callan)
- Programming (Ben McIntyre)
- Scoring (Sys/Mech Leads)



Action Items



q ?