
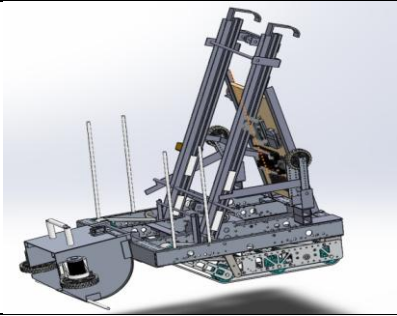
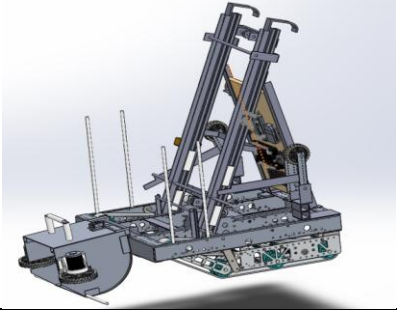
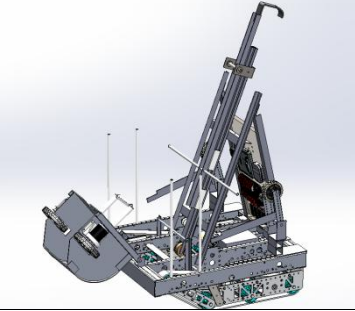
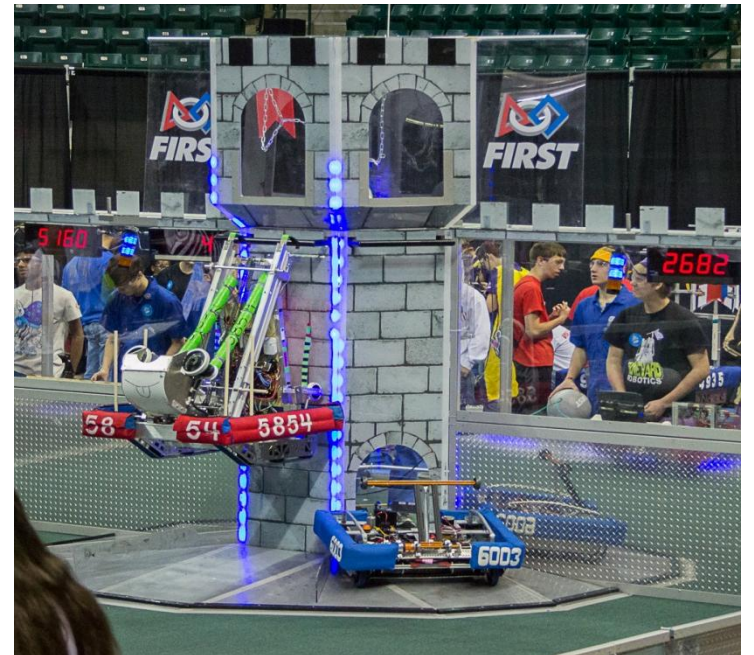
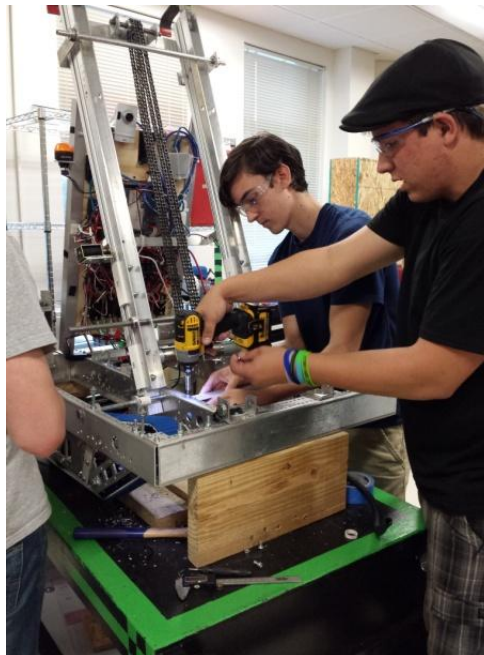
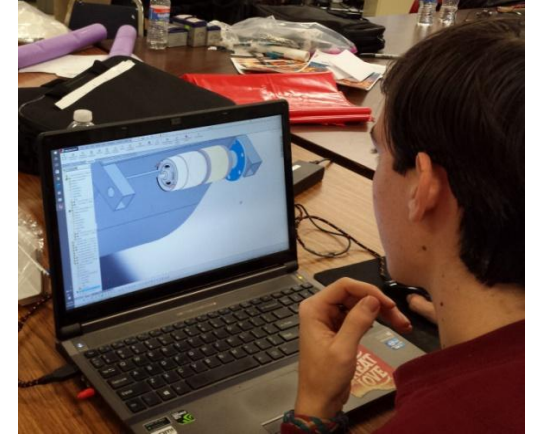
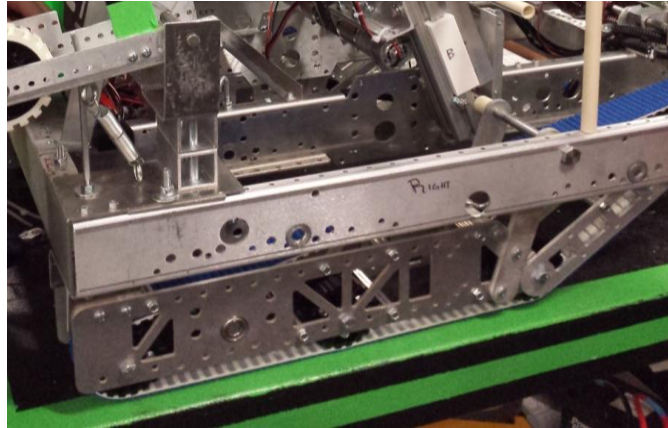




Evolution of Our 2016 Robot

Week One District Event	Week Three District Event
	
Description <ul style="list-style-type: none"> • Drive used 6 large 14" wheels and 4 CIM motors • High velocity shooter • Two-hook climber with friction fighting wheels and automatic latch 	Description of Changes <ul style="list-style-type: none"> • With careful planning, preparation and organization we were able to refit robot with tank drive in one 2-hour work session! • Improved camera and driver feedback for more accurate shooting • Added autonomous program • Bumpers modified to meet rules
Successes <ul style="list-style-type: none"> • Able to shoot and sometimes made high goal • Able to scale tower, but latch (to prevent robot from sagging after end of match) did not always catch 	Successes <ul style="list-style-type: none"> • Able to safely cross some defenses. The tank tracks worked! • Able to scale tower, but latch did not always catch
Challenges <ul style="list-style-type: none"> • Could NOT cross defenses. Wheels were too hard. We were forced to limit our movements to "spy bot". • Missed many matches while in pit experimenting with 4-wheel drive and weight reduction. • Decided as a team to switch to tank tracks – determined to do fundraising to pay for them. • Bumpers not legal, need changes 	Challenges <ul style="list-style-type: none"> • Autonomous crossing of some defenses caused robot to tip over. • Shooting still not accurate enough, drivers need practice
Ranking: 29 th out of 30 - (1 st pick of 7 th Alliance)	Ranking: 22 nd out of 24 - (1 st pick of 5 th Alliance)

NC State Championship	<i>FIRST</i> World Championship
	
Description of Changes <ul style="list-style-type: none"> • Lightened robot, but still heavy • Added autonomous program for spy bot that reliably shoots the high goal • Added second latch to catch both sides of lifter 	Description of Changes (in process) <ul style="list-style-type: none"> • Changed 2 hook climber to 1 hook climber • Removed many pounds of weight • Repaired robot from last event
Successes <ul style="list-style-type: none"> • Able to shoot and reliably made high goal • Able to scale tower reliably • Drive team figured out how to shoot high goal while climbing 	Successes <ul style="list-style-type: none"> • To be determined
Challenges <ul style="list-style-type: none"> • Double hooks sometimes hard to position for scaling tower • Need a faster, more reliable climber • Robot needs to lose weight • Robot “tippy” when going over defenses • Robot fell hard after a failed climb, damaged potentiometer 	Challenges <ul style="list-style-type: none"> • To be determined
Ranking: 3 rd out of 32 – (Captain of 3 rd Alliance)	Ranking: Stay tuned folks...



FRC Team 5854 - GLITCH