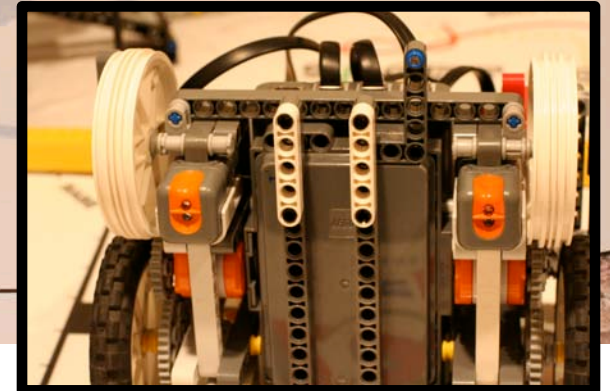
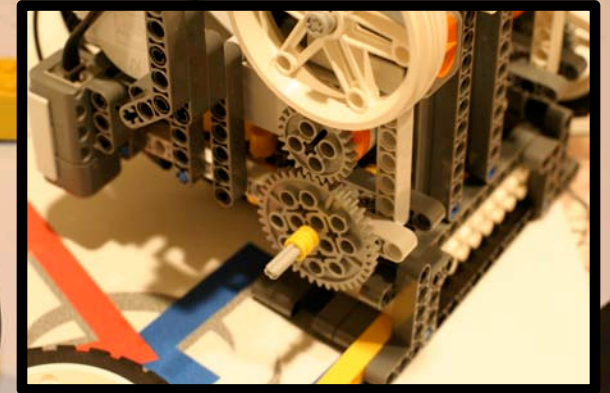
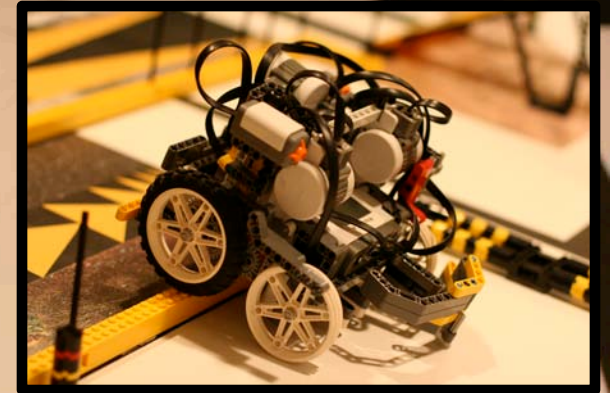
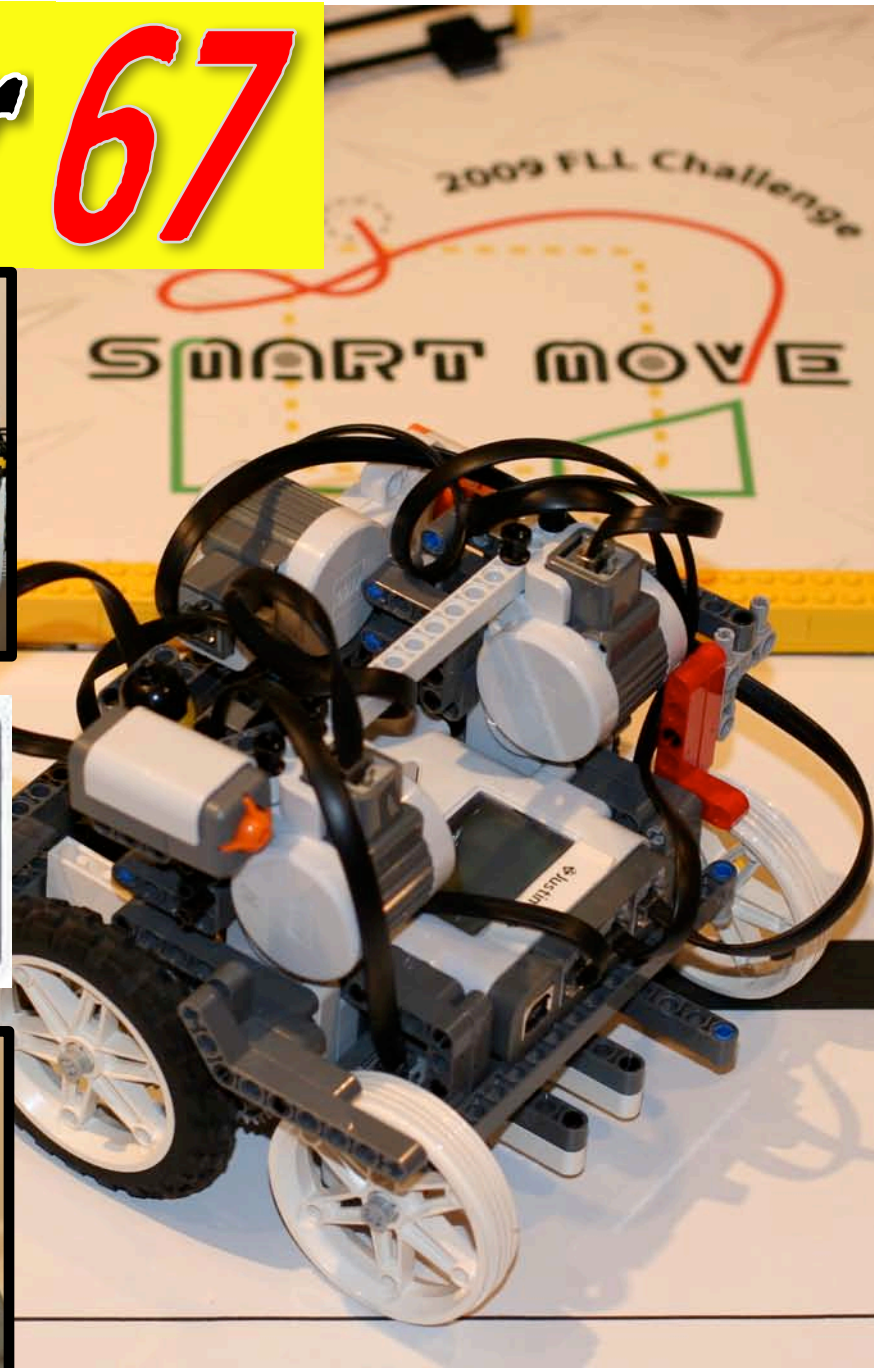
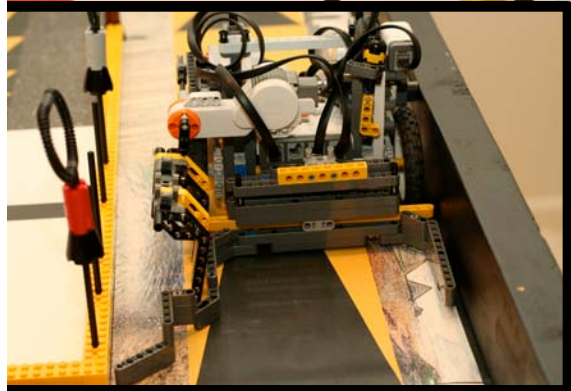
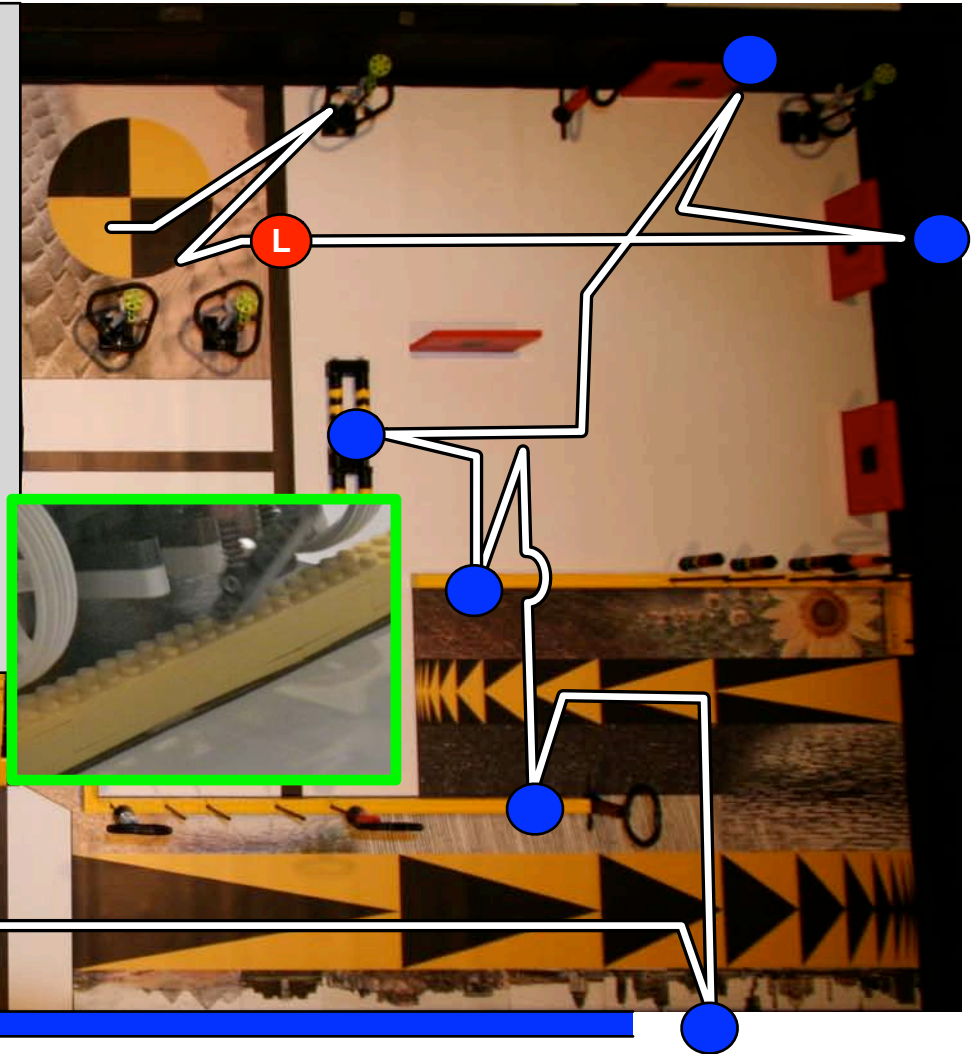


# Vector 67



# "We Don't Need Roads!"

1. Chassis/robot design dictated by getting into the dynamometer area (considered 4WD)
2. Wide axle, short wheel base, center of mass moved toward drive wheels
3. Hinged back bumper and front shock absorber to hop barrier (see video)
4. Eight alignments (one angled) to increase reliability



40 Sec

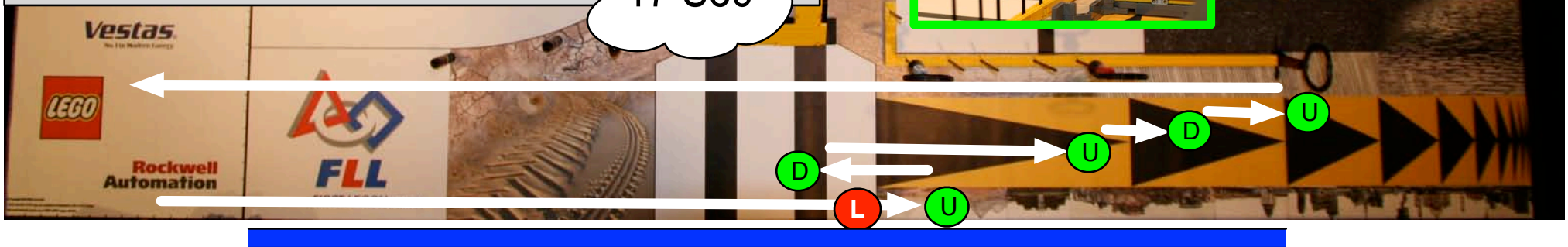
- Sensor Reading
- Robot Alignment



# "Pitch Fork 'n Pull Out"

1. Offset axis & motor in back because of chassis/wall alignment. Made custom for chassis. Considered other missions and weight distribution.
2. Claw design increases accuracy. Moves after lifting loops to avoid getting stuck on spires.
3. Uses light sensor & wall alignment.
4. Removed inaccurate turns

17 Sec

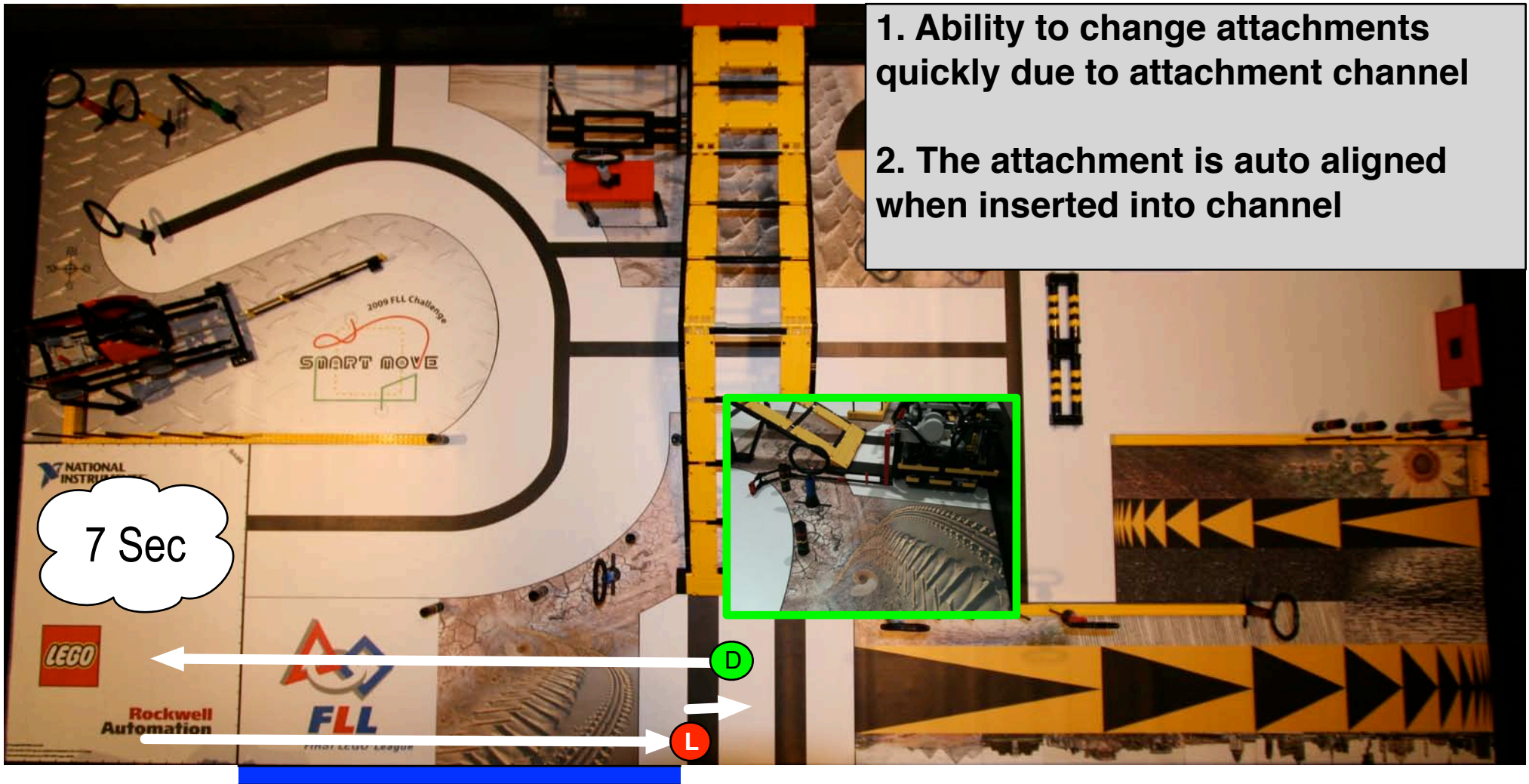


- Sensor Reading
- Robot Alignment

● Robot Arm

# "Ka-Ra-Te!"

1. Ability to change attachments quickly due to attachment channel
2. The attachment is auto aligned when inserted into channel

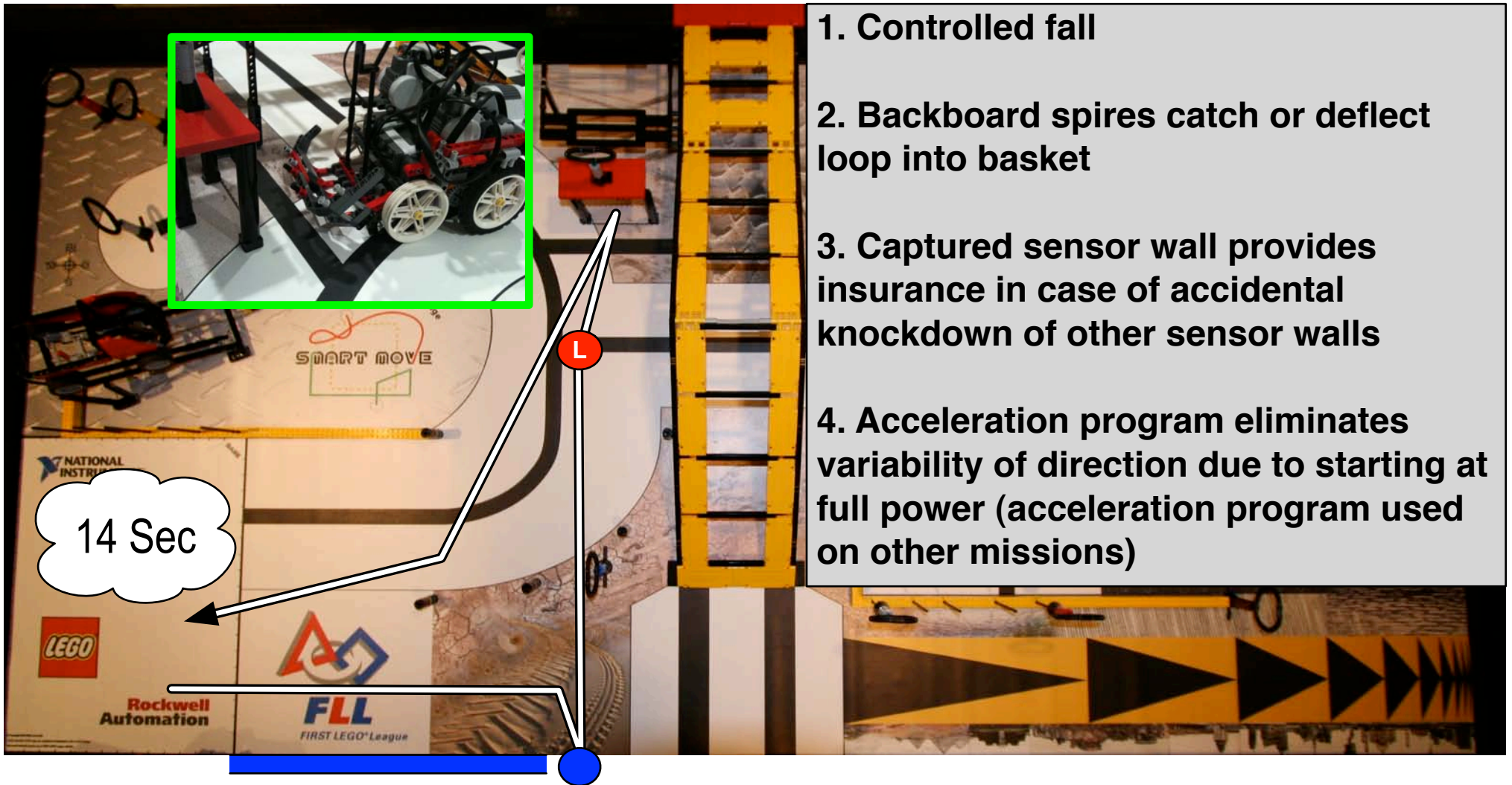


- Sensor Reading
- Robot Alignment

● Robot Arm

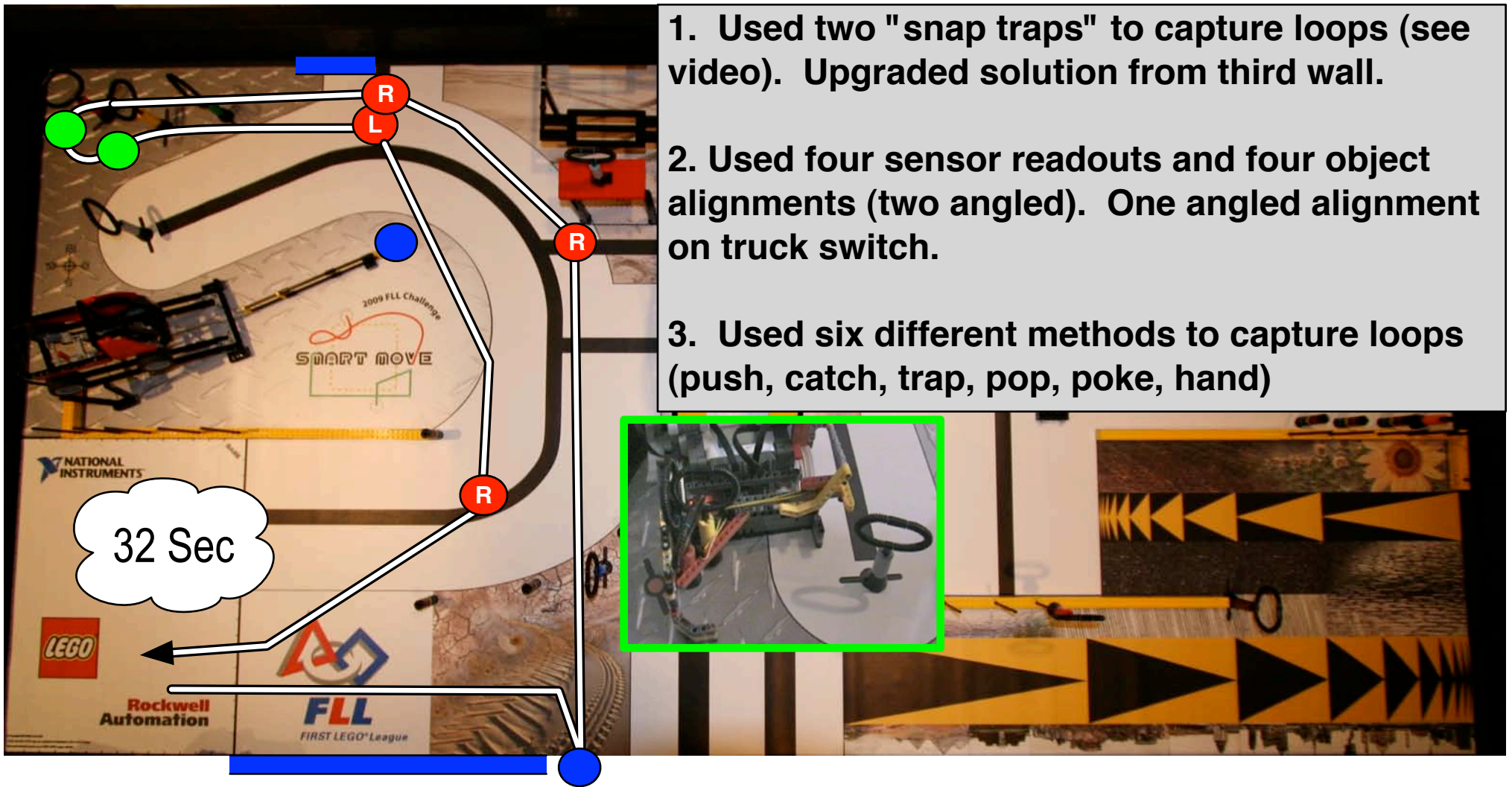


# "Controlled Destruction"



- Sensor Reading
- Robot Alignment

# "Oh . . . Snap!"



1. Used two "snap traps" to capture loops (see video). Upgraded solution from third wall.
2. Used four sensor readouts and four object alignments (two angled). One angled alignment on truck switch.
3. Used six different methods to capture loops (push, catch, trap, pop, poke, hand)

● Sensor Reading  
● Robot Alignment

● Robot Arm