

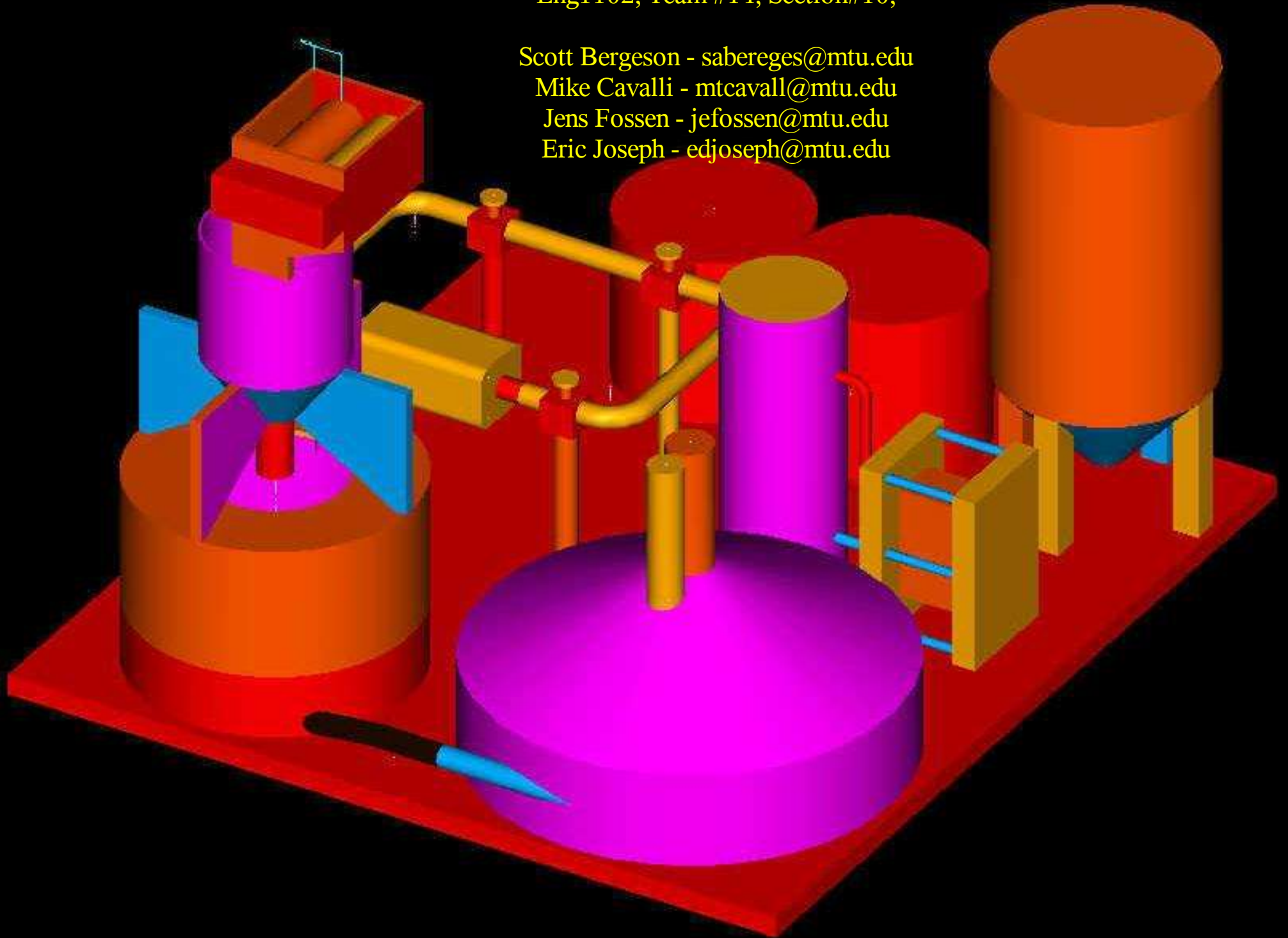
Eng1102, Team #14, Section#10,

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Eric Joseph - edjoseph@mtu.edu



Eng1102 Section 10 Team 1 Van Brew Inc.

Keith White
Kevin Berry
Justin Makes
Jon Apitz

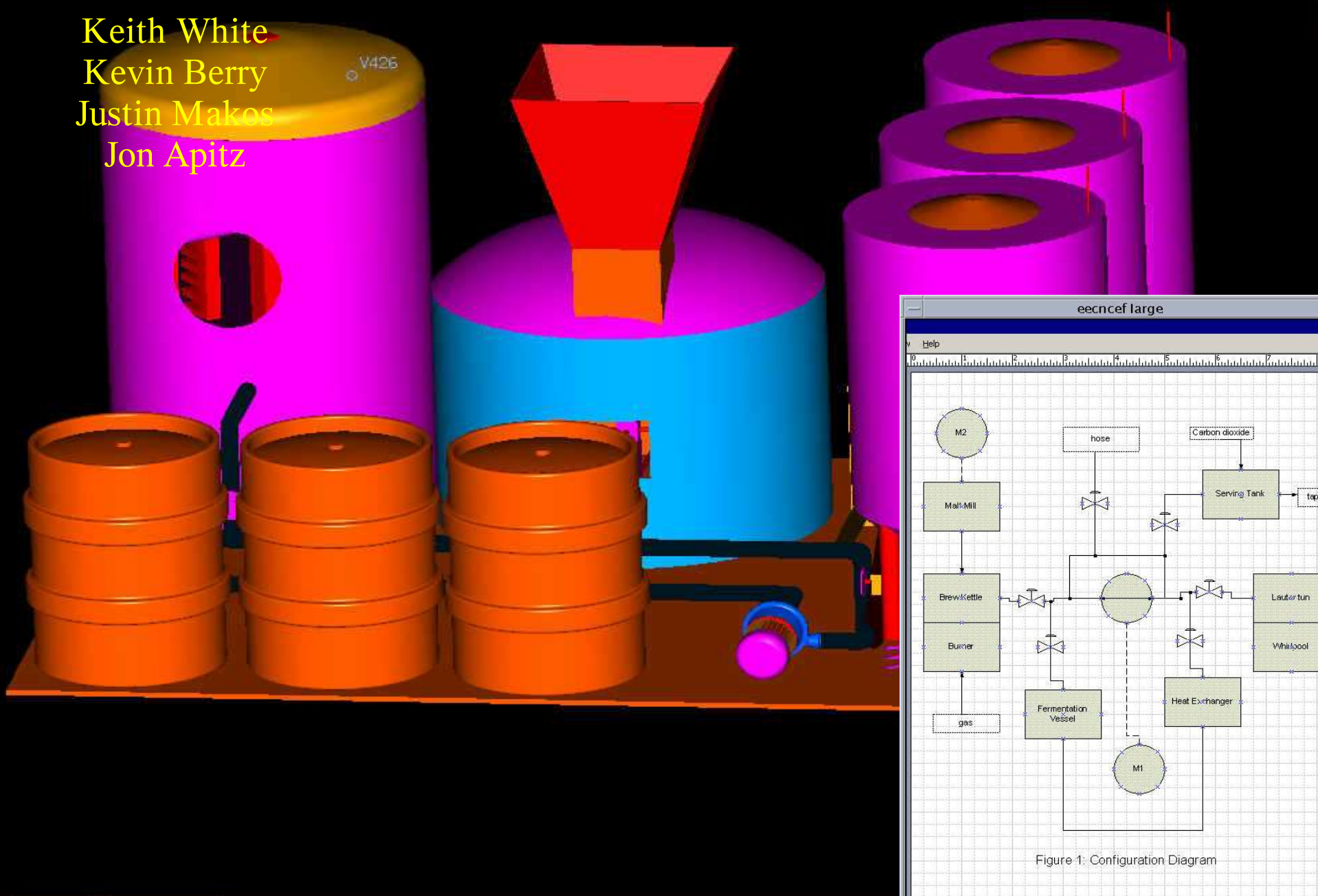
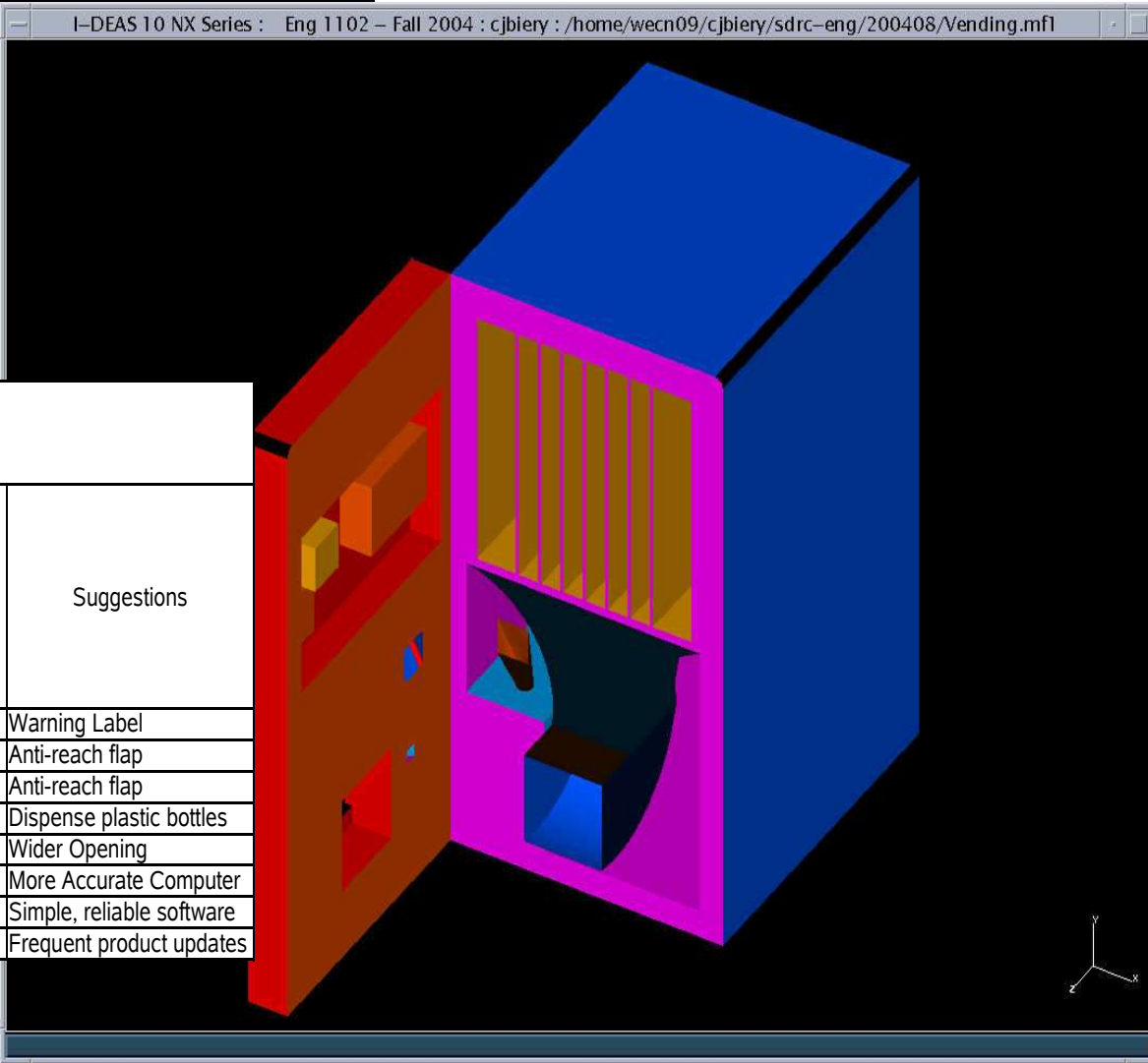


Figure 1: Configuration Diagram

Nickie Barna
Jake Barden
Jeff Piaskowski
Cameron Biery

Energy Budget

Item	Voltage (V)	Current (A)	Power Req'd (kw)	Unit Energy Cost (\$/kw-hr)	Daily Operating Hours	Daily Energy Cost (\$)	Yearly Energy Cost (\$)
Cooling Unit (running)	110	1	0.11	0.07	20.500	\$0.16	\$57.62
Cooling Unit (surge)	110	14.5	1.6	0.07	3.500	\$0.39	\$142.63
Vending Motors	110	1	0.11	0.07	0.033	\$0.00	\$0.09
Bill Acceptor (idle)	110	0.2	0.02	0.07	23.945	\$0.04	\$13.46
Bill Acceptor (accepting)	110	0.75	0.08	0.07	0.055	\$0.00	\$0.12
Change Acceptor (idle)	110	0.2	0.02	0.07	23.876	\$0.04	\$13.42
Change Acceptor (accepting)	110	0.75	0.08	0.07			
Change Acceptor (returning)	110	3.6	0.4	0.07			
Credit Card Machine (idle)	110	0.2	0.02	0.07			
Credit Card Machine (running)	110	0.75	0.08	0.07			
Total cost per day							
References: www.geneng.mtu.edu, www.howstuffworks.com							

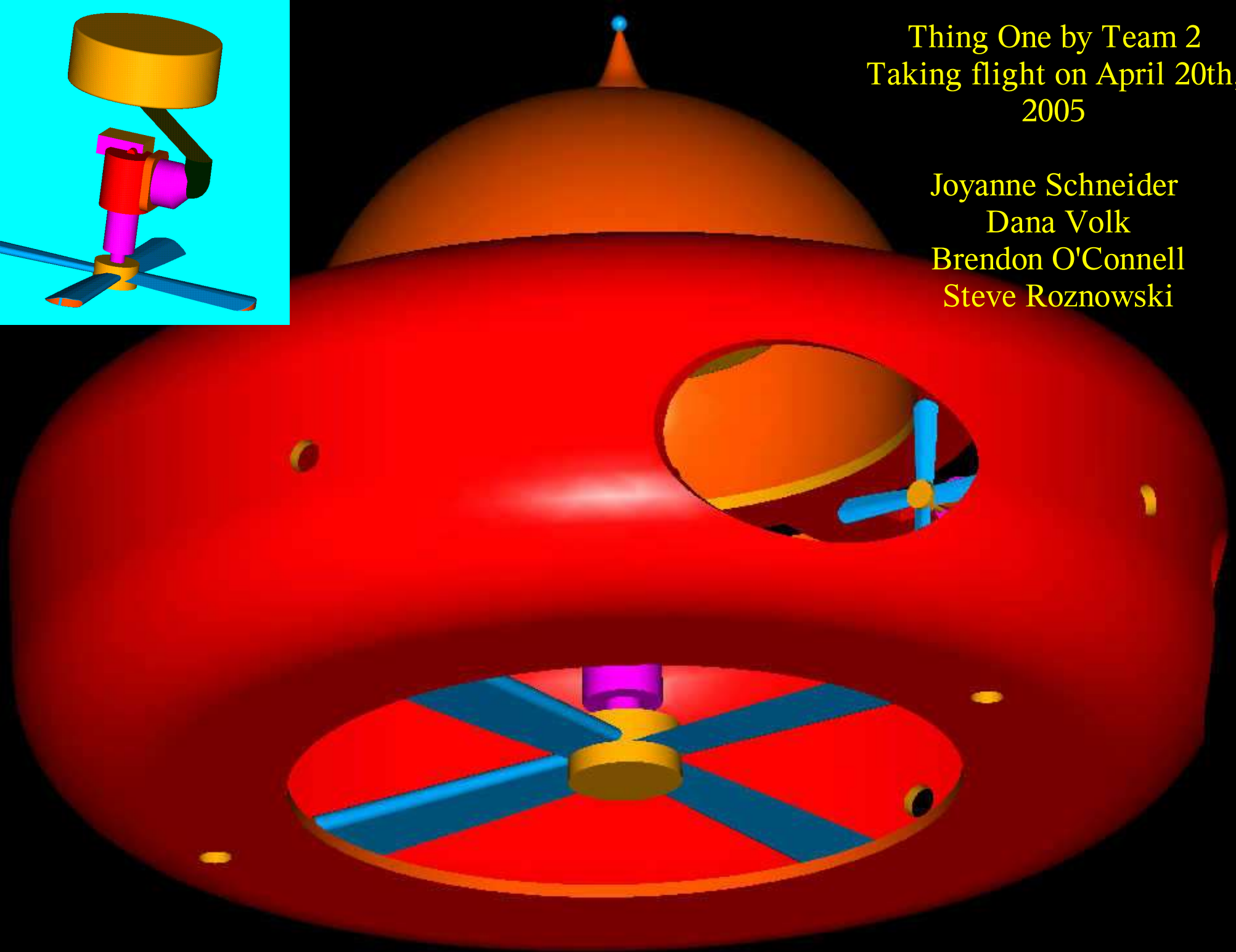
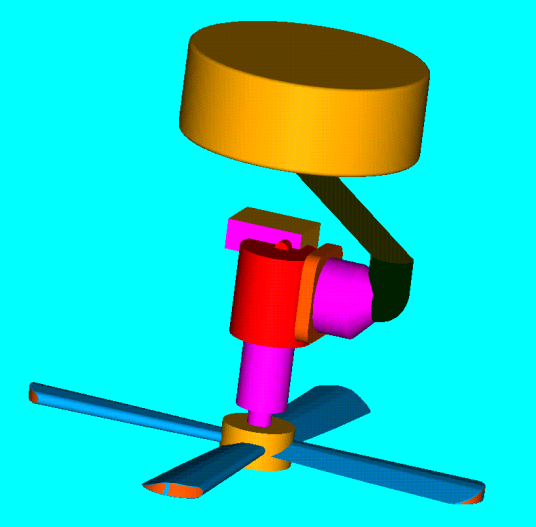


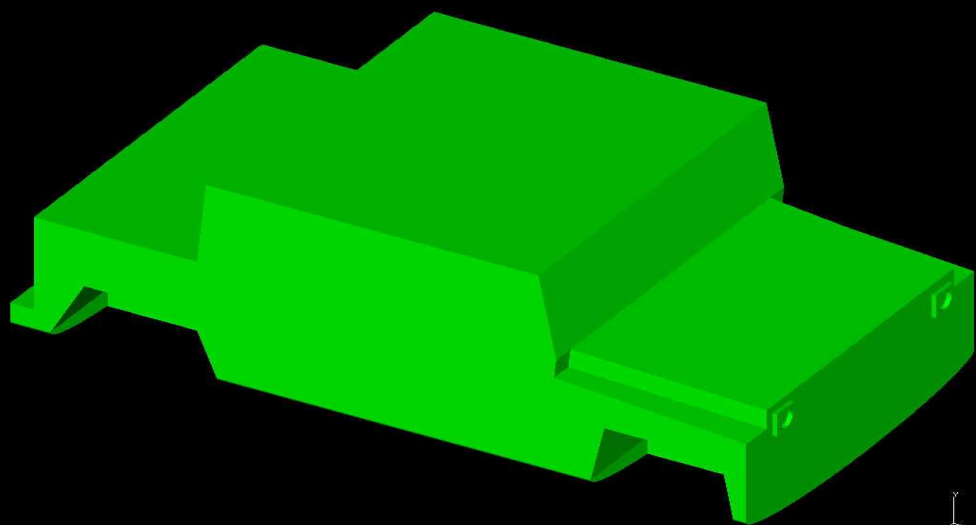
Vending Machine Hazard Analysis

Description of Hazard	Rating Type			Total	Suggestions
	Severity	Occurrence	Failure Detection		
Machine can be tipped over	10	3	10	300	Warning Label
Foreign objects lodged in change drop	7	4	10	280	Anti-reach flap
Foreign objects lodged in product funnel	7	3	10	210	Anti-reach flap
Beverage explodes during release	6	2	8	96	Dispense plastic bottles
Coins jammed in change collector	6	3	2	36	Wider Opening
Improper money returned	7	4	3	84	More Accurate Computer
Computer malfunction	5	3	1	15	Simple, reliable software
No product dispensed	5	6	2	60	Frequent product updates

Thing One by Team 2
Taking flight on April 20th,
2005

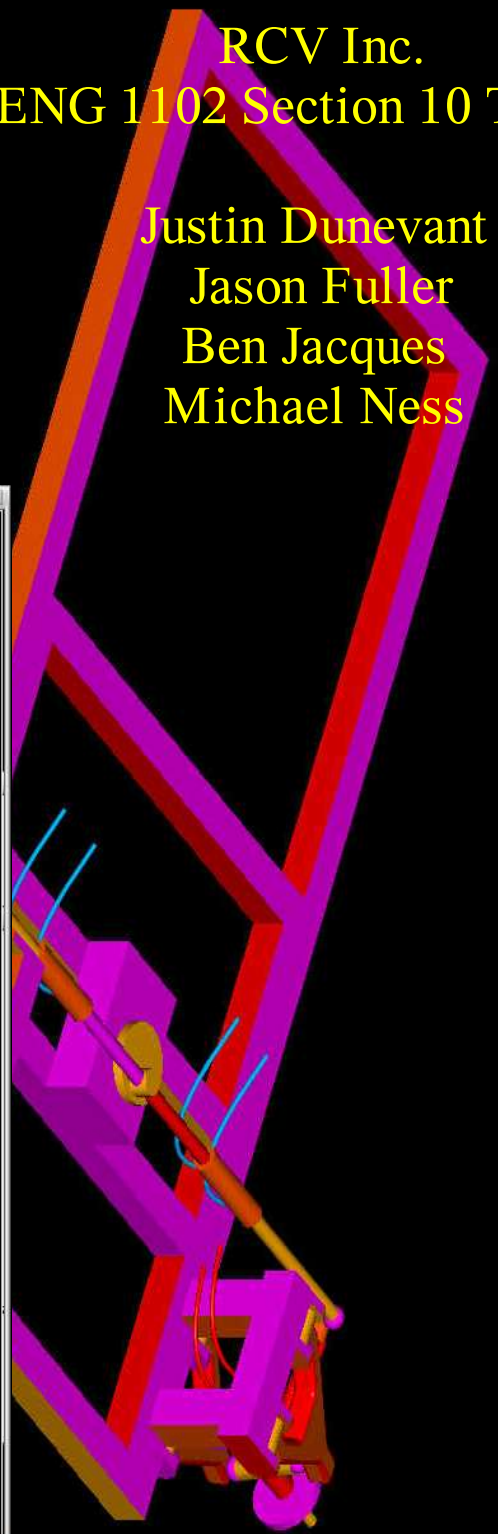
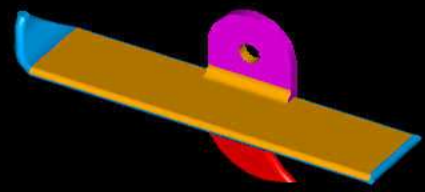
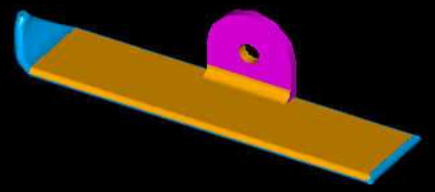
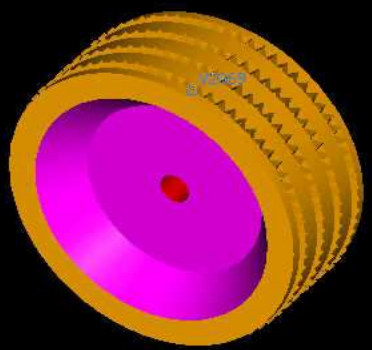
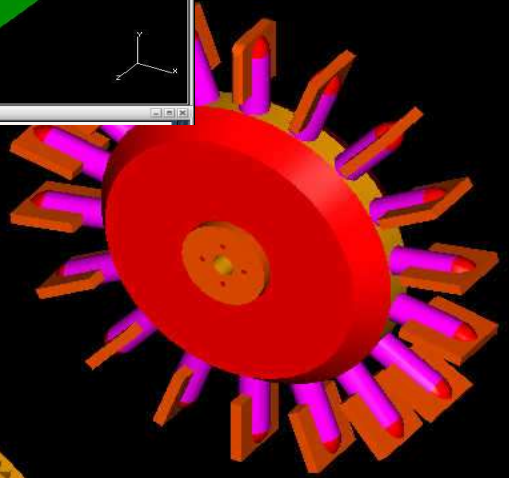
Joyanne Schneider
Dana Volk
Brendon O'Connell
Steve Roznowski





RCV Inc.
ENG 1102 Section 10 Team 4

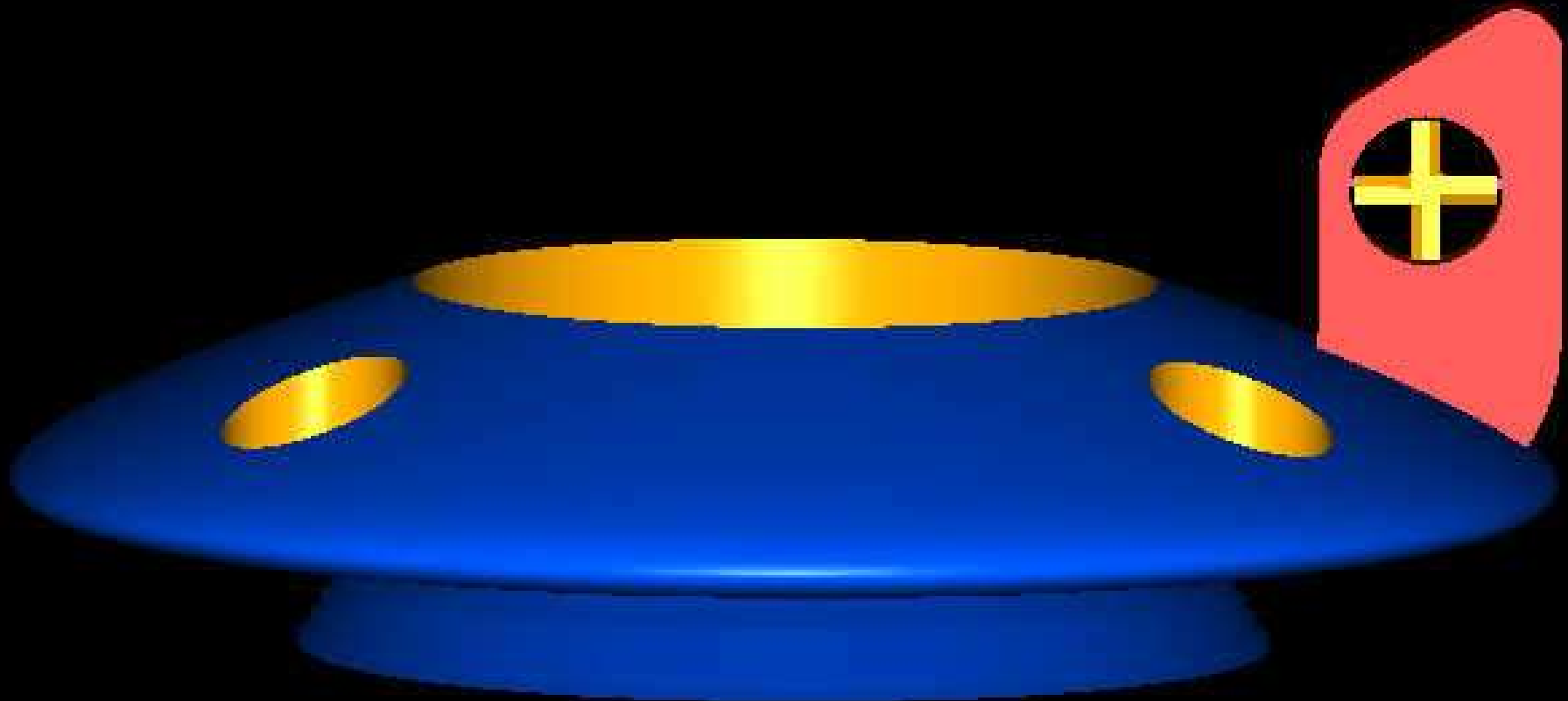
Justin Dunevant
Jason Fuller
Ben Jacques
Michael Ness



RCV Inc.

Team 8

Brandon Ellefson, Ian Verhey, Wayne Bell, Dan Gezon



The MassagePod 3000

ENG1102: Section 10, Team 15

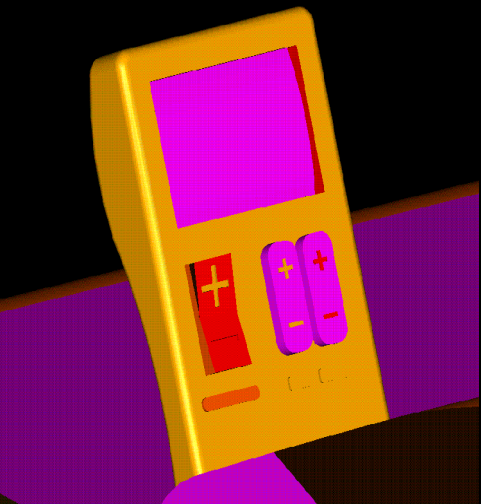
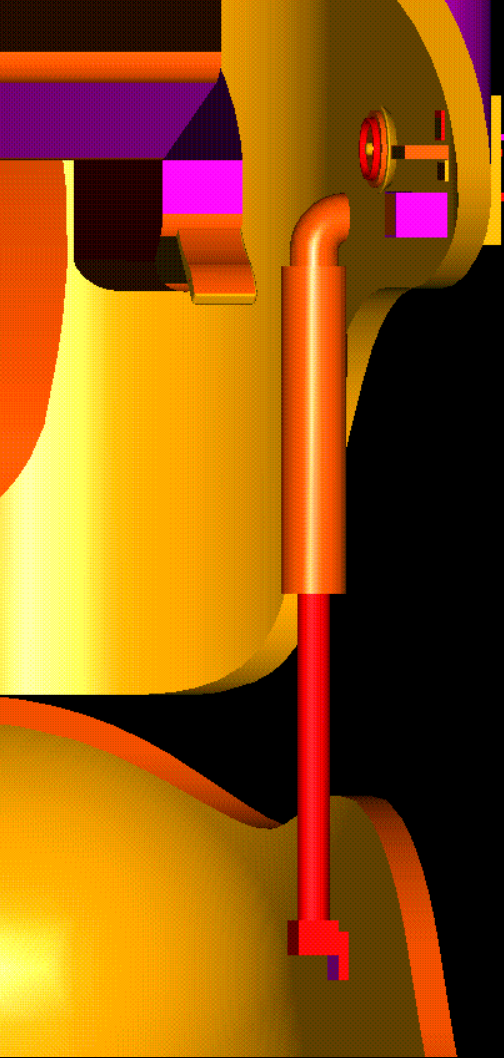
JakeTech Inc.

Samuel Kilpela

Jacob Kloss

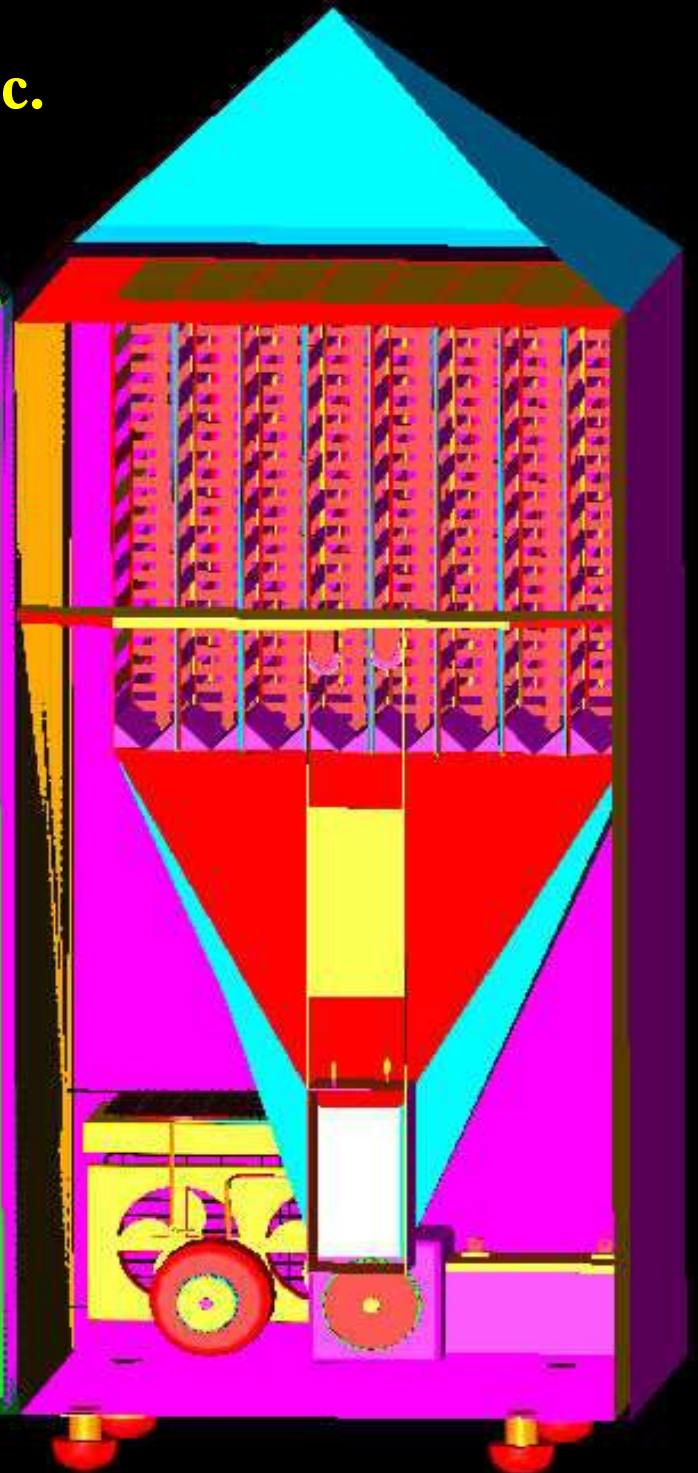
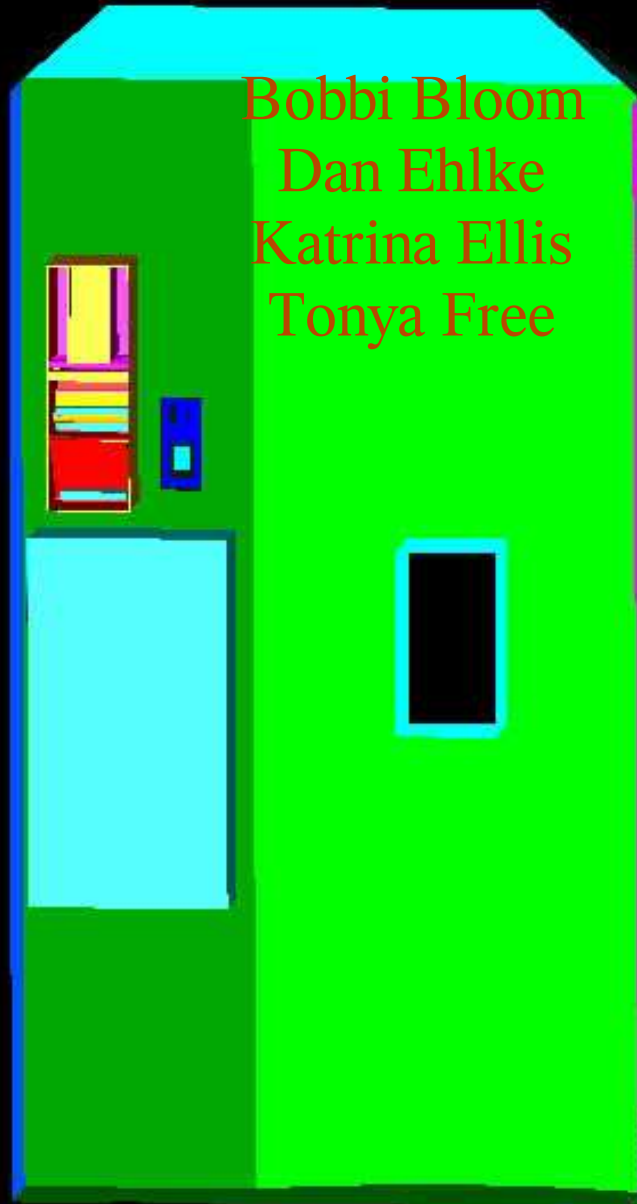
Michael Senkow

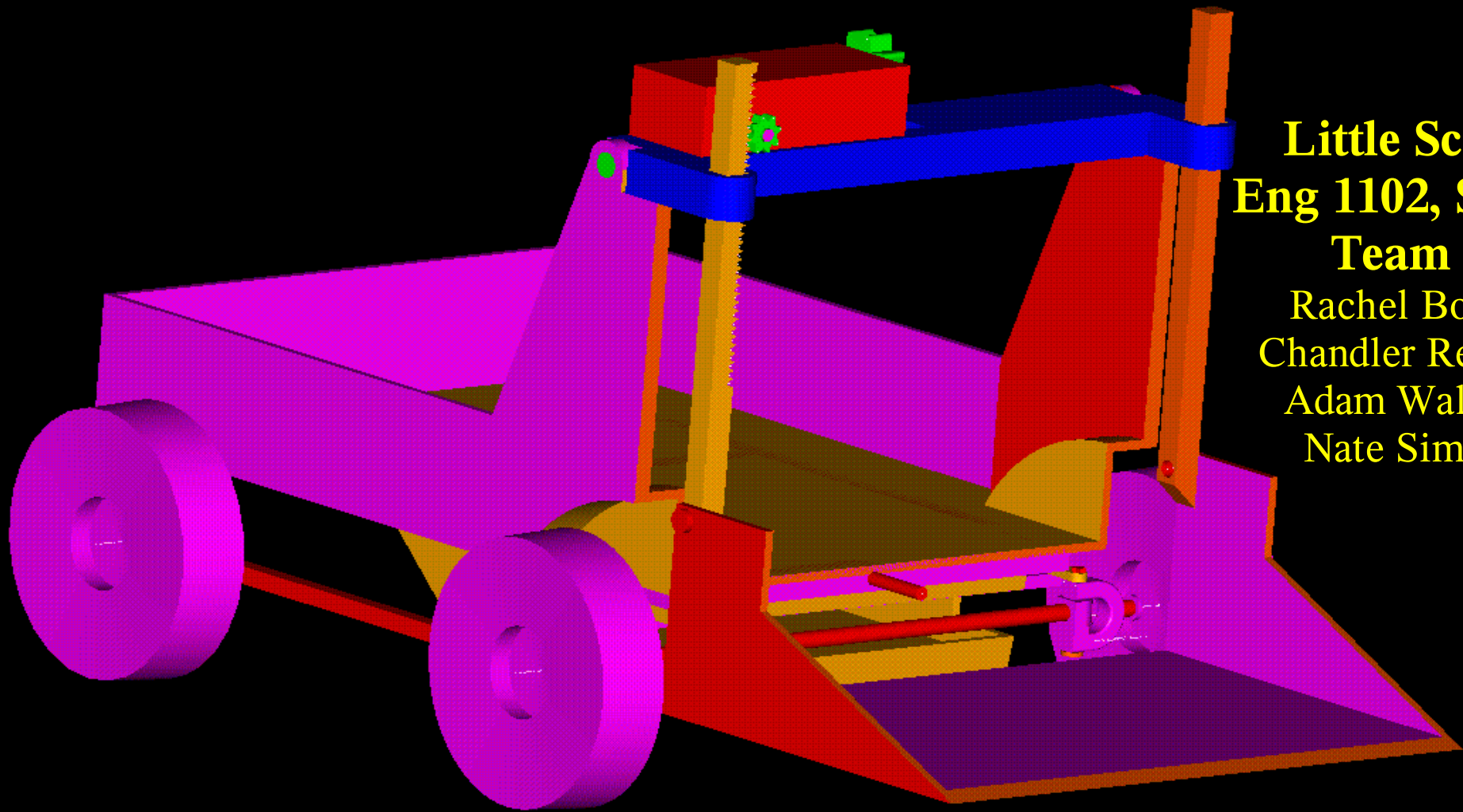
Dustin Sommer



**Inverse Tech Ratio Inc.
(Team 7)**

Bobbi Bloom
Dan Ehlke
Katrina Ellis
Tonya Free

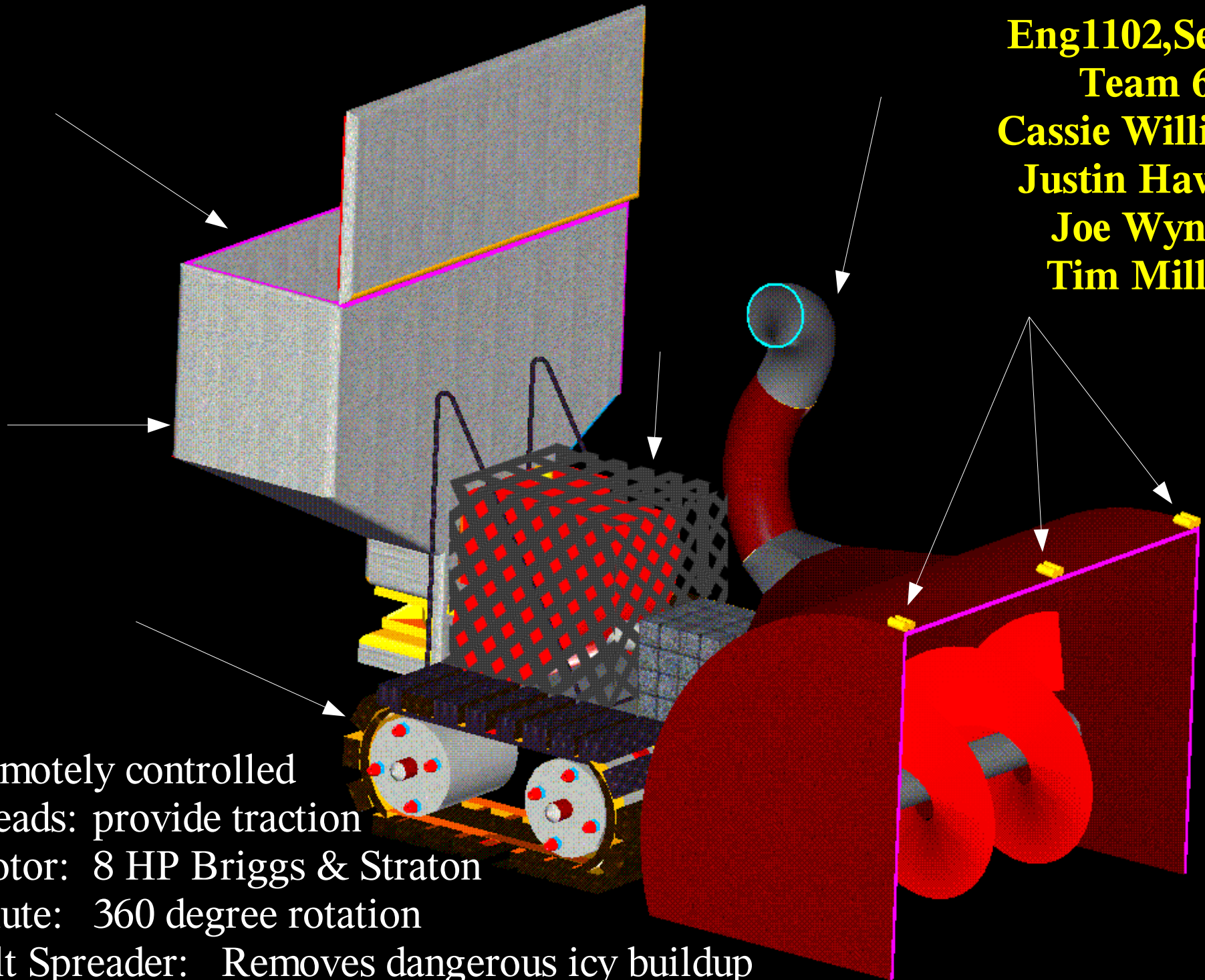




Little Scoop
Eng 1102, Sec 02
Team 9
Rachel Boone
Chandler Reppert
Adam Walther
Nate Simula

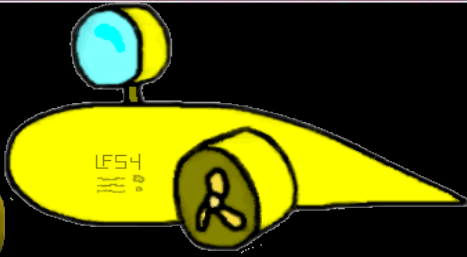


Eng1102,Sec 02
Team 6
Cassie Williams
Justin Hawley
Joe Wynia
Tim Miller



1. Remotely controlled
2. Treads: provide traction
3. Motor: 8 HP Briggs & Stratton
4. Chute: 360 degree rotation
5. Salt Spreader: Removes dangerous icy buildup
6. Sensors: Prevents damaging and potentially fatal encounters

Yellow Spymarine



Eng 1102, Sec.

- Team 4 -

Nick Howe

Nate Thomas

Cassie Thiel

Mike Trewartha

