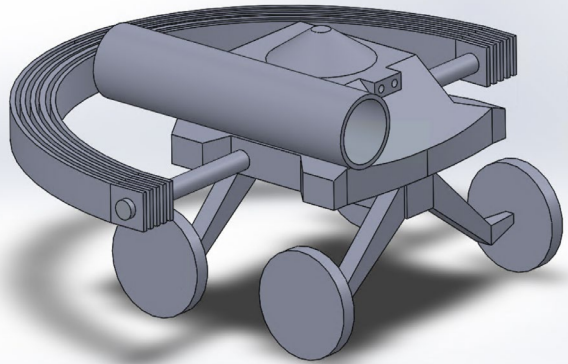
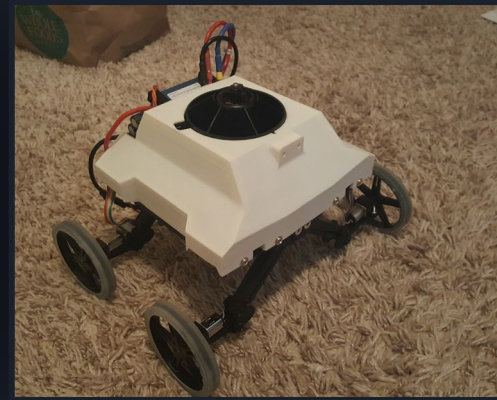
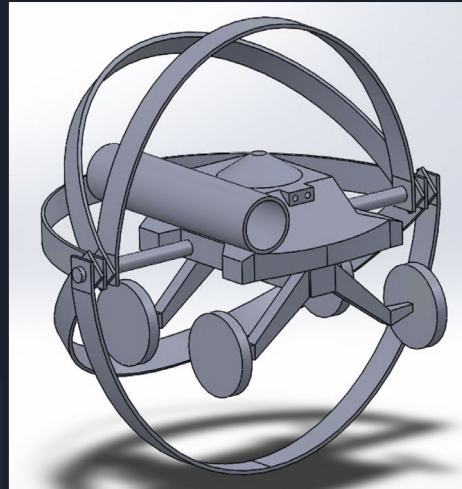


# Safe Fall Team 2

Emerson Phipps, Harrison Ray, Jade  
Freehling  
Sponsor: Lockheed Martin

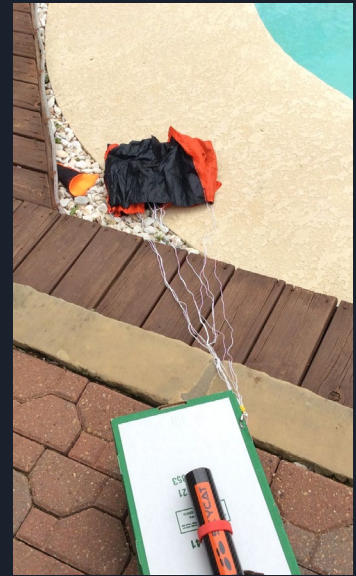
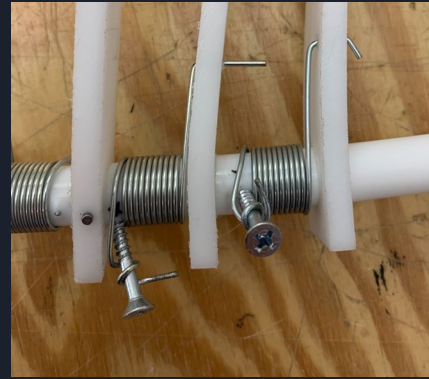
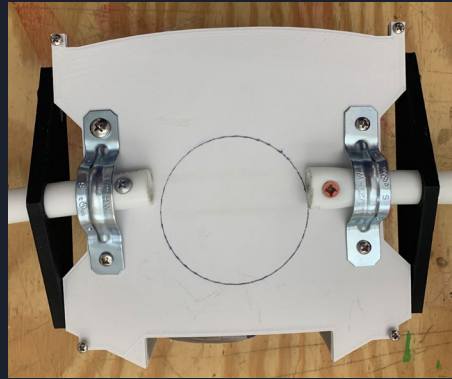


Armed



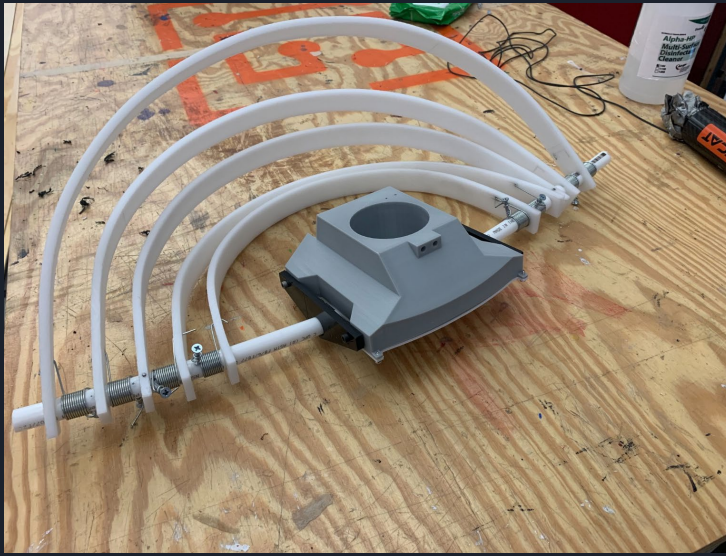
Deployed

# Individual mechanisms



## Basic Material List

- 8 Torsion Springs
- 2 Aluminum Brackets
- 5 high-density polyethylene half-rings
- Lightweight rod to hold the spring-loaded rings
- Ring clamp system
- Lightweight rotary servo motor
- SkyCat parachute launcher system
- Parachute and ring mounts
- Infrared proximity sensor



hieght (ft)	hieght (m)	Time in air (sec)	Impact velocity (m/s)	Impact Energy (J)
1	0.30	0.25	2.45	6.78
2	0.61	0.35	3.46	13.56
3	0.91	0.43	4.24	20.34
3.3	1.06		4.6	26
4	1.22	0.50	4.89	27.13
5	1.52	0.56	5.47	33.91
6	1.83	0.61	5.99	40.69
7	2.13	0.66	6.47	47.47
8	2.44	0.71	6.92	54.25
9	2.74	0.75	7.34	61.03
10	3.05	0.79	7.73	67.81
11	3.35	0.83	8.11	74.60
12	3.66	0.86	8.47	81.38
13	3.96	0.90	8.82	88.16
14	4.27	0.93	9.15	94.94
15	4.57	0.97	9.47	101.72
16	4.88	1.00	9.78	108.50
17	5.18	1.03	10.08	115.28
18	5.49	1.06	10.38	122.07
19	5.79	1.09	10.66	128.85
20	6.10	1.11	10.94	135.63
21	6.40	1.14	11.21	142.41
22	6.71	1.17	11.47	149.19
23	7.01	1.20	11.73	155.97
24	7.32	1.22	11.98	162.75
25	7.62	1.25	12.23	169.53
26	7.92	1.27	12.47	176.32
27	8.23	1.30	12.71	183.10
28	8.53	1.32	12.94	189.88
29	8.84	1.34	13.17	196.66
30	9.14	1.37	13.39	203.44
31	9.45	1.39	13.62	210.22
32	9.75	1.41	13.83	217.00
33	10.06	1.43	14.05	223.79
34	10.36	1.45	14.26	230.57
35	10.67	1.47	14.47	237.35
36	10.97	1.50	14.67	244.13
37	11.28	1.52	14.88	250.91
38	11.58	1.54	15.07	257.69

