MASA launch, Blaine, October 23, 1999					Total #	Total
#	Name	Rocket	Motor(s)	Comment	Motors	Impulse
1	Mark Thell	Omega	D12-0; D12-5	whoa!	2	34
2	Mike Martens	Bad Toad	D12-5	Bad!!! Oh, yeah.	1	17
3	Mike Martens	Triad	C6-3, C6-3, C6-5	new design	3	27
4	Mike Martens	Stomp	B6-4	reliable	1	5
5	Alan Estenson	Razzle Dazzle	D12-5	maiden voyage, cool flight	1	17
6	Alan Estenson	SD1	A8-3	streadur, 15.66 seconds	1	2.5
7	Lee Frisvold	Wac Corporal	C6-3	good flight	1	9
8	Mike Martens	Duration	A8-3	nominal, streadur, 13.26 seconds	1	2.5
9	Glen Overby	Lawn Dart	C6-5		1	9
10	Sarah Fergus	Totally Tubular	B6-4	first flight	1	5
11	Russ Durkee	Streamer Dreamer	A8-3	streadur, 7.28 seconds	1	2.5
12	Josh M	Big Bertha	C6-5		1	9
13	Kristen	Zipper	B6-2		1	5
14	Mollie Frisvold	Steamer	A8-3	streadur, 49.40 seconds!!!	1	2.5
15	Sam Howard	Viking	A8-3	first flight	1	2.5
16	Rick Howard	TLAR FFNC-1	A8-3	scratchbuilt, first flight	1	2.5
17	Peder	Boogie 'til ya Puke	D12-7	scratchbuilt, first flight	1	17
18	Ricky Jerve	Army	B6-4		1	5
19	Brady Jerve	TransWing	B6-4	great flight!	1	5
20	Tyler	Icerise	B6-4		1	5
21	Alan Estenson	SD1	A8-3	streadur, 17.24 seconds	1	2.5
22	Sarah Fergus	Nike Arrow	1/4A3-2t		1	0.625
23	David Fergus	2x Nike Arrow	D12-5	scratchbuilt	1	17
24	Lee Jerve	Moondog	A10-3t		1	2.5
25	Debelser	Astrocam	C6-7		1	9
26	Mollie Frisvold	Streamer Duration	A8-3	streadur, dq	1	2.5
27	Lee Frisvold	Quark Ray	A10-0t; A10-3t	first flight	2	5
28	Lee Frisvold	Streamer Duration	A8-3	streadur, 34.03	1	2.5
29	Garrett LaHay	Big Dawg	B4-4		1	5
30	Josh	Wildfire	C5-3		1	9.5
31	Kristen	Big Bertha	B6-2		1	5
32	Russ Durkee	Streamer Dreamer	A8-3	streadur, 17.77 seconds	1	2.5
33	Mike Kutzke	Black Hole Probe	B4-2	17 year old rocket	1	5
34	Philip Gibbens	Blue Hornet	A8-3	streadur, dq	1	2.5
35	Mathias Gibbens	scratch	A8-3	streadur, dq	1	2.5
36	David Bailey	Big Bertha	C6-5	first flight	1	9
37	Chuck Jerve	Astrocam	C6-7	film loaded!	1	9
38	Ed Eastman	Orange Rhymer	A8-3	streadur, dq	1	2.5
39	Eric Zietlow	Goblin	C6-5		1	9
40	Sam Howard	Viking	B6-4	first flight on B6-4	1	5
41	Dave Fergus	AIM-9 Sidewinder	D12-5	first flight on a D12	1	17

42	Kerry Hodges	Der Red Max	B4-4	20 years old (the rocket, not Kerry)	1	5
43	Rick Howard	FFNC-1	B6-4	first on B6-4	1	5
44	Chuck Jerve	contest rocket	A8-3	streadur, 18.54 seconds	1	2.5
45	Ed Eastman	Silver Comet	D12-3	gold, not silver	1	17
46	Tyler	streamer deration	A8-3	streadur, 20.19 seconds	1	2.5
47	Brady Jerve	contest rocet	A8-3	6 fins, streadur, dq	1	2.5
48	Glen Overby	Wac Corporal	D9-4		1	20
49	Brian K	Tangent	B4-4	first flight	1	5
50	David Bailey	Big Bertha	C6-5		1	9
51	Art Gibbens	Bugsy	A3-4t		1	2.5
52	Lee Frisvold	streamer contest	A8-3	streadur, 30.48 seconds	1	2.5
53	Nate K	Pathfinder	D12-5	first flight	1	17
54	Alan Estenson	Razzle Dazzle	E15-7	whee!, late ejection	1	40
55	Brandon Ward	Wizard	B6-4		1	5
56	Greg Debelser	Astrocam	C6-7		1	9
57	Art Gibbens	Silver Streak	C6-7	streamer	1	9
58	Russ Durkee	custom built	D12-7		1	17
59	Mollie Frisvold	Streamer Duration	A8-3	streadur, 9.33 seconds	1	2.5
60	Peder	Streamer Duration	A8-3	streadur, 13.33 seconds	1	2.5
61	Chuck Jerve	Astrocam	C6-7	film loaded!	1	9
62	Ricky Jerve	Army	B6-4		1	5
63	Mollie Frisvold	Sizzler	C6-3		1	9
64	Garrett LaHay	Big Dawg	C6-5		1	9
65	Dave Fergus	SAROS	B8-5	28 year old rocket	1	5
66	Sam Howard	Viking	A8-3		1	2.5
67	Lee Grimm	Streamer Duration	A8-3	streadur, 20.31 seconds	1	2.5
68	Mark Thell	Titan	B6-4	first flight	1	5
69	Brian K	Tangent	B4-4		1	5
70	Glen Overby	Wac Corporal	D9-4		1	20
71	David Bailey	Big Bertha	C6-5		1	9
72	Larry Schwartz	AMRAAM	C6-0; C6-7		2	18
73	Larry Schwartz	Tomcat	C6-3	It won't die!	1	9
74	Sam Howard	Viking	A8-3		1	2.5
75	Mollie Frisvold	Zenith	B6-0; B6-6		2	10
76	Ed Eastman	Aztec	B6-0; B6-6	first flight	2	10
77	Kerry Hodges	2x Der Red Max	F50-4	2nd flight, scratchbuilt	1	80
78	Lee Jerve	Moondog	A10-3t		1	2.5
79	Mike Martens	F22	C6-3		1	9
80	Mike Kutzke	Initiator	F20-7		1	64
81	Dave Fergus	Mercury Redstone	A3-4t	1/100th	1	2.5
82	Mollie Frisvold	contest	A8-3		1	2.5
83	Greg Debelser	Ionizer	C6-5		1	9
84	Brian K	Tangent	B4-4		1	5
85	Tyler Thompson	Sabore	B6-4	first flight	1	5

86	Art Gibbens	Bullpump	C6-0; C6-7	2 stage!	2	18
87	Larry Schwartz	Check Six	D12-7		1	17
88	Larry Schwartz	Star Fire	D12-7		1	17
89	Lee Frisvold	scratch Wac	B6-4	first flight	1	5
90	Chuck Jerve	Astrocam	C6-7	film loaded!	1	9
91	Mark Thell	Lil' Nuke	F20-7		1	64
92	Ed Eastman	Streamer Duration	A8-3	streadur, dq	1	2.5
93	Mike Martens	Stretch Bertha	D12-5		1	17
94	Brian Fergus	Mini Mean Machine	A3-4t		1	2.5
95	Brady Jerve	competition rocket	A8-3	streadur, 13.07 seconds	1	2.5
96	Mike Kutzke	Saturn V+	G35-4	first flight	1	105
97	Lee Frisvold	2-stage Fat Boy	D12-0; C6-5		2	26
98	Larry Schwartz	Fat Boy	D12-5		1	17
99	Larry Schwartz	Bullpup	A8-3		1	2.5
100	Art Gibbens	Saturn V	D12-0; D12-3	second flight	2	34
101	Mollie Frisvold	contest	A8-3		1	2.5
102	Ricky Jerve	Army	B6-4		1	5
103	Garrett LaHay	Big Dawg	B4-4		1	5
104	Tyler Clayton	Gliderless Manta	A8-3		1	2.5
105	Larry Schwartz	2-stage Fat Boy	C6-0(4); D12-7		5	53
106	Larry Schwartz	Skywinder	C6-3		1	9
107	Peder	Boogie 'til ya Puke	D12-7		1	17
108	KC Clayton	Jinx	A8-3	first flight	1	2.5
109	Lee Frisvold	Silver Comet	D12-5		1	17
110	Glen Overby	Aerobee 300	G33-5	heads up, first flight	1	100
111	Tyler Thompson	Sizzler	C6-5		1	9
112	Larry Schwartz	Bullpup	A8-3		1	2.5
113	Larry Schwartz	Helio Copter	C6-3		1	9
114	Larry Schwartz	AMRAAM	C6-3		1	9
115	Levi Bopp	Rampage	B4-4		1	5
116	Rachel Golias	Super Shot	A8-3		1	2.5
117	Jeff LaHay	Bullpup 12D	B4-4	first flight	1	5
118	Ryan	Athena	A8-3	first launch	1	2.5
119	Tyler Clayton	Gliderless Manta	A8-3		1	2.5
120	Levi Bopp	ARV	B6-2		1	5
121	Larry Schwartz	Skywinder	C6-3		1	9
122	Ryan Golias	Flash	B6-4		1	5
Total Flights: 122					**136**	**1413.125**
Total Motors: 136						
Total Impulse (N-s): 1413.125						
Average Impulse (N-s): 10.4						

Motor Distribution	
MM	0

1/4 A	1
1/2A	0
A	40
B	31
C	36
D	22
E	1
F	3
G	2
H	0