

MASA launch, Blaine, July 22, 2000					Total #	Total
#	Name	Rocket	Motor(s)	Comment	Motors	Impulse
1	Lee Frisvold	2 stage Fat Boy	D12-0; C6-5		2	26
2	Dave Fergus	Free Fall	B6-2	1 GI-Joe guy on a parachute	1	5
3	Mollie Frisvold	Maxi Alpha	D12-3	first flight	1	17
4	Dave Debelser	Moondog	A3-10t		1	2.5
5	Dave Fergus	AIM-9 Sidewinder	D12-5		1	17
6	Mike Martens	Stomp	A8-3	BOINK!	1	2.5
7	Christian Vatsaas	Heatseeker	A8-3		1	2.5
8	Kerry Hodges	Gabriel	D12-3, (2) B6-0	tangled chute	3	27
9	Joe Kimmes	Initiator	F23-4		1	56
10	John Carlson	Interceptor	C6-3	25 year old rocket	1	9
11	Steve Robb	Deltie Thunder	E11		1	35
12	Joel Henry	Astrocam	C6-7		1	9
13	Mike Martens	Dandy Dart	A8-3		1	2.5
14	Lee Grimm	Autosite1	A3-4t	1st flight, flex wing glider, came apart	1	2.5
15	Rick Vatsaas	Fat Boy	E30-7	rear ejection, worked well	1	40
16	Steve Hum	Callisto	F52-7	first flight	1	78
17	Dave Fergus	Upscale Nike Arrow	D12-5	core sample - no damage	1	17
18	John Carlson	Mars Snooper	C6-3	25 year old rocket	1	9
19	Rick Vatsaas	SAM-X	C6-0; C6-7		2	18
20	Mark Thell	AMRAAM	C6-3		1	9
21	Joe Schneider	Interceptor G	F62		1	80
22	Tim Bush	AMRAAM 2	G35-7		1	105
23	Mark Thell	Fire & Forget	F20-7		1	64
24	Joel Henry	Liberty	B6-4	first flight	1	5
25	Brad Vatsaas	The Evil Dr. Manchu's	H123	Avenging Projectile of Doom	1	246.8
26	John Carlson	Big Bertha	D12-3		1	17
27	Don Kilberg	Big Daddy	D12-5		1	17
28	Brian Kilberg	Mustang	F20-7		1	64
29	Carolyn Kilberg	Legacy	D12-3	first flight	1	17
30	Alan Estenson	IO	G35-7		1	105
31	Tim Bush	Ring Hawk	C6-5	very nice glide	1	9
32	John Carlson	Mars Lander	C6-3	20 year old rocket	1	9
33	Mollie Frisvold	V2 (kit bash)	D12-5	drag race	1	17
34	Lee Frisvold	V2 (kit bash)	D12-5	drag race	1	17
35	Dave Fergus	Greyhawk Interceptor	C6-5	good flight	1	9
36	Alan Estenson	Dynamic Carrier	C6-5		1	9
37	Phil Ryan	Mean Machine	D12-3		1	17
38	Greg Schneider	Nostromo	H128		1	177.9
39	Tim Bush	Darkwing	A10-3t	boost glider	1	2.5
40	Chris Kvidera	Glider	B6-4		1	5
41	Mike Martens	Stretch Bertha	D12-5		1	17

42	Lee Frisvold	Comanche-3	D12-0; B6-0; C6-5		3	31
43	Marge Hum	Ecee	1/2A3-2t	first flight	1	1.25
44	Mollie Frisvold	Skywinder	C6-3		1	9
45	Damian Kostron	Cuda	E7	R/C BG	1	30
46	John Carlson	Super Bertha	(2) D12		2	34
47	Russ Durkee	Cuda	D7	R/C BG	1	20
48	Kerry Hodges	R2-D2	C5-3		1	9.5
49	Alex Carlson	Alpha 3	B6-4		1	5
50	Austin Carlson	R2-D2	A10-3t		1	2.5
51	Dave Fergus	D Region Tomahawk	D12-5	good flight	1	17
52	Dan Nestor	Firebird	B4-2		1	5
53	Glen Overby	?	D12-5	first flight	1	17
54	Steve Hum	Aspire	G64-7		1	120
55	Joe Kimmes	Tomahawk	B6-4	first flight	1	5
56	John Carlson	Angus 3	C6-3	old Estes design	1	9
57	Joe Schneider	Tie Fighter	C6-3		1	9
58	Frank Kinderman	Flash	C6-5		1	9
59	? Clan Abide	Code Red	C6-5		1	9
60	Joe Schneider	Explorer Aquarius	D12-3		1	17
61	Greg Debelser	Ionizer	C6-5		1	9
62	Alan Estenson	Chaparral	F23-7		1	56
63	Mike Town	G-Force	G38		1	94
64	Ryan Schwartz	AMRAAM	C6-3		1	9
65	Mollie Frisvold	Mean Machine clone	D12-3		1	17
66	Brian Maas	Jinx	A10-3t	first flight	1	2.5
67	Dave Fergus	Silver Comet	D12-3		1	17
68	Carolyn Kilberg	Legacy	E15-7	lawn dart	1	40
69	Don Kilberg	Aura	E15-4		1	40
70	Brian Kilberg	Stealth Interceptor	B4-4	first flight	1	5
71	Ed Ryan	lil' Nuke	G35-7		1	105
72	Ryan Schwartz	Helio Copter	A8-3		1	2.5
73	Joel Henry	Astrocam	C6-7	separation	1	9
74	Chris Hum	Big Bertha	B6-2		1	5
75	Larry Schwartz	2 stage Fat Boy	(4) C6; D12-7	wow!	5	53
76	Rick Vatsaas	Astron Sprint	C6-7	rebuilt 25 year old rocket	1	9
77	Tim Bush	AMRAAM 2	G35-7		1	105
78	Graham Maas	Code Red	C6-5	first flight	1	9
79	Mike Town	Alpha	C6-7		1	9
80	John Carlson	Nike-K	B6-4		1	5
81	Steve Robb	Deltie Thunder	F12	wow!	1	45
82	Dave Fergus	lil' Nuke	E15-7	core sample - no damage	1	40
83	Rick Vatsaas	Bullpup	C6-5		1	9
84	Mark Thell	Forte	G35		1	105
85	Tim Bush	Ring Hawk	C6-5	boost glider	1	9

86	John Knoll	Atlas Centaur	G55-5	first flight (and it was incredible!)	1	125
87	Brad Vatsaas	Big Daddy	G64-7		1	120
88	Phil Ryan	Mean Machine	D12-3		1	17
89	Larry Schwartz	Chaparral	G64-10		1	120
90	Rick Vatsaas	Big Daddy	E15-7		1	40
91	Lee Frisvold	2 stage Big Daddy	D12-0; D12-5	definitely not overpowered	2	34
92	Joel Henry	Pathfinder	D12-5	first flight	1	17
93	Jackie Maas	Jamestown College	A8-3	Tuition Buster	1	2.5
94	Caitlin Bright	Wizard	A8-3		1	2.5
95	Dave Fergus	Manta	B4-2	boost glider	1	5
96	Steve Robb	Trans Wing	C6-3	1st flight, boost glider	1	9
97	Ted Cochran	Saturn V	E18-4	good flight	1	39
98	John Carlson	ASP	A10-3t		1	2.5
99	David Bright	Fat Boy	B6-2		1	5
100	Russ Durkee	Quest UFO	D24		1	19.6
101	Rick Vatsaas	Tsetse	D12-7		1	17
102	Ed Ryan	Vertical Scratch	G35-7	first flight	1	105
103	Alan Estenson	Starburst	(2) G55-10	good flight	2	250
104	Michael Kutzke	Seeker	D12-3	first flight	1	17
105	John Carlson	Orion	C6-3	Centuri remake	1	9
106	Brad Vatsaas	Big Daddy	(7) C6-5	cluster, only lit 3 motors, barely made it off pad	3	27
107	John Carlson	V2	B6-4	25 year old rocket	1	5
108	Dave Fergus	V2	1/2A2-2		1	1.25
109	Tim Bush	SR-71	C6-5	first flight	1	9
110	Randy Hoff	Sidewinder	C6-3		1	9
111	Chris Kvidera	scratchbuilt	(3) B6-4		3	15
112	Tim Bush	Darkwing	A10-3t	unstable	1	2.5
113	John Carlson	Bandit	B6-4	52 flights	1	5
114	Randy Hoff	Nike-X	B6-4		1	5
115	Brian Kilberg	Mustang	F20-7		1	64
116	John Carlson	Centuri X-2	D12-3	2X upscale	1	17
117	Rick Vatsaas	Staged Lawn Aeration	C6-0; C6-5	Projectile	2	18
118	Don Kilberg	Initiator	F25-6		1	80
119	Steve Hum	AMRAAM 2	F52		1	78
120	Mike Town	Skywinder	C6-3	first flight	1	9
121	John Carlson	WAC Corporal	B6-4	own design	1	5
122	Mike Martens	F22 boost glider	C6-3	"Steve Austin flight!"	1	9
123	Joe Schneider	Prowler	C6-3		1	9
124	Dave Fergus	SAROS	C6-5	25 year old rocket	1	9
125	Joe Schneider	Mach Buster	D12	separation	1	17
126	Joe Schneider	Wasp	F62		1	80
127	Russ Durkee	Cuda	E7	R/C BG	1	30
128	Joel Henry	Astrocarn	C6-7		1	9
129	Lee Frisvold	Mercury Atlas	D12-3	slow deploy	1	17

130	Mike Kutzke	Saturn 1b	D12-3	nice	1	17
131	Mike Kutzke	Star Wars ship	A3-4t	unstable	1	2.5
132	Ryan Schwartz	Fat Boy	D12-7	no chute	1	17
133	Mark Thell	Legacy	F20		1	64
134	Dan Nestor	Initiator	E15-4	unstable	1	40
135	Brad Vatsaas	The Evil Dr. Manchu's	H242	Avenging Projectile of Doom	1	246
136	Joel Henry	Pathfinder	E30-7	stripped chute	1	40
137	Ryan Schwartz	Mach Buster	D12-7		1	17
138	Alan Estenson	Long Shot	D12-0; C6-7	weak booster engine	2	26
139	Caitlin Bright	Wizard	A8-3		1	2.5
140	Dave Fergus	Snitch	C6-0		1	9
141	Steve Robb	Deltie Thunder	F12		1	45
142	Glen Overby	Aerobee Thing	C6-0; C6-7		2	18
143	Lee Frisvold	Big Bertha	C6-5	25 year old rocket	1	9
144	Lee Frisvold	WAC Corporal	D12-5	separation	1	17
145	Ryan Schwartz	Helio Copter	C6-3	drag race	1	9
146	Ryan Schwartz	Skywinder	C6-3	drag race	1	9
147	David Bright	Fat Boy	C5-3		1	9.5
148	Mollie Frisvold	Zenith 2	C6-0; C6-5		2	18
149	Doug Debold	Silver Comet	D12-3		1	17
150	Alan Estenson	Blossom (V2)	D12-3		1	17
151	Glen Overby	Apache	G64	altimeter based dual deployment	1	120
152	Dave Fergus	lil' Nuke	F20-4	2nd flight	1	64
153	Lee Frisvold	V2	B6-4	25 year old rocket	1	5
154	Alan Estenson	Der Big Red Max	C6-5	replica	1	9
155	Rady Hoff	Wildfire	B6-4		1	5
156	Alan Estenson	Mimi	D12-7	(it whistled!)	1	17
157	Ed Ryan	Vertical	G35-7		1	105
158	Mollie Frisvold	2 stage Fat Boy	D12-0; C6-5		2	26
159	Doug Debold	Silver Comet	D12-3		1	17
160	Lee Frisvold	Black Brant	D12-5		1	17
161	Dave Fergus	Biplane B/G	A10-3t		1	2.5
162	Mollie Frisvold	V2	D12-5		1	17
163	Steve Robb	Pathfinder	D12-3	first flight, tangled chute	1	17
164	Randy Hoff	Condor ARV	B6-4	first flight	1	5
165	Larry Schwartz	Check-Six	D12-7		1	17
166	Chris Kvidera	Graduator	G35-7		1	105
167	Russ Durkee	Stark Fist of Removal	D12-7		1	17
168	Steve Hum	Big Daddy	E15	separation	1	40
169	Blake Ryan	Alpha	C6-5		1	9
170	Joel Henry	Bullpup 12D	C6-5		1	9
171	Dave Fergus	AIM-9 Sidewinder	D12-3		1	17
172	Mark Thell	lil Bigger Nuke	F23		1	56
173	Ed Ryan	Lightnin'	D12-0; D12-7	ejection at staging	2	34

174	Dave Fergus	Snitch	C6-0		1	9
<b>Total Flights: 174</b>					<b>197</b>	<b>5437.8</b>
<b>Total Motors: 197</b>						
<b>Total Impulse (N-s): 5437.8</b>						
<b>Average Impulse (N-s): 27.6</b>						
<b>Motor Distribution</b>						
MM	0					
1/4 A	0					
1/2A	2					
A	16					
B	24					
C	59					
D	50					
E	12					
F	15					
G	16					
H	3					