

| MASA launch, Buffalo, April 24, 2004 |                   |                     |                     |   | Total # | Total   |
|--------------------------------------|-------------------|---------------------|---------------------|---|---------|---------|
| #                                    | Name              | Rocket              | Motor(s)            | Comment   | Motors  | Impulse |
| 1                                    | Allison Carpenter | Baby STOMP          | C6-5                | first flight  | 1       | 9       |
| 2                                    | Elliot Carpenter  | STOMP               | B6-4                |   | 1       | 5       |
| 3                                    | Todd Carpenter    | Sidewinder          | C6-5                |   | 1       | 9       |
| 4                                    | Ted Cochran       | Nike Smoke          | B6-4                | first flight  | 1       | 5       |
| 5                                    | Ted Cochran       | Honest John         | E30-4               |   | 1       | 40      |
| 6                                    | Gib Curry         | [unknown]           | D12-7               |   | 1       | 17      |
| 7                                    | Gib Curry         | [unknown]           | D12-7               |   | 1       | 17      |
| 8                                    | Gib Curry         | Alpha               | B6-4                |   | 1       | 5       |
| 9                                    | Ed Eastman        | Thunderbird 7       | B6-4                | 1st flight, Renegade kit-bash                             | 1       | 5       |
| 10                                   | Ed Eastman        | XF-52 Stardrake     | B6-4                | lowest flight of day - 1 foot                             | 1       | 5       |
| 11                                   | Ed Eastman        | Fat Boy "Cartman"   | A8-3                | Cartman is now in ICU                                     | 1       | 2.5     |
| 12                                   | Ed Eastman        | Cheetah             | B6-0; A8-5          | first flight  | 2       | 7.5     |
| 13                                   | Mike Erpelding    | V2                  | D12-5               |   | 1       | 17      |
| 14                                   | Mike Erpelding    | The Cluster of Doom | (2) D11-P, (2) B6-6 | lit 3 of 4 motors, lost nosecone from payload at ejection | 3       | 39      |
| 15                                   | Lee Frisvold      | 2 stage Fat Boy     | D12-0; C6-5         | good flight   | 2       | 26      |
| 16                                   | Lee Frisvold      | Martin Pescador     | (2) D12-3           |   | 2       | 34      |
| 17                                   | Lee Frisvold      | Public Enemy V2     | F20-4               |   | 1       | 64      |
| 18                                   | Lee Frisvold      | Gyroc               | A8-3                |   | 1       | 2.5     |
| 19                                   | Lee Frisvold      | Nike Smoke          | B6-4                | good flight   | 1       | 5       |
| 20                                   | Lee Frisvold      | Gyroc               | A8-3                |   | 1       | 2.5     |
| 21                                   | Lee Frisvold      | Zenith II           | B6-0; C6-5          | did not stage, lawn dart                                  | 1       | 5       |
| 22                                   | David Gensler     | Eliminator          | E9-6                | good flight   | 1       | 29.5    |
| 23                                   | David Gensler     | Harpoon AGM         | C6-5                |   | 1       | 9       |
| 24                                   | David Gensler     | Harpoon AGM         | C6-5                |   | 1       | 9       |
| 25                                   | David Gensler     | Renegade Kitbash    | C6-5                |   | 1       | 9       |
| 26                                   | David Gensler     | Navy Seahawk        | D12-5               |   | 1       | 17      |
| 27                                   | David Gensler     | Python              | B4-4                |   | 1       | 5       |
| 28                                   | David Gensler     | Patriot             | C6-5                | good flight   | 1       | 9       |
| 29                                   | David Gensler     | Pathfinder          | D12-5               | good flight   | 1       | 17      |
| 30                                   | Art Gibbens       | BOINK               | B6-4                |   | 1       | 5       |
| 31                                   | Art Gibbens       | Stretched Polaris   | D12-7               | 1st flight, separation                                    | 1       | 17      |
| 32                                   | Philip Gibbens    | Boink               | B6-4                |   | 1       | 5       |
| 33                                   | Philip Gibbens    | Venture             | B6-4                | good flight   | 1       | 5       |
| 34                                   | Dakota Haller     | Javelin             | C6-3                |   | 1       | 9       |
| 35                                   | Dakota Haller     | Patriot             | D12-3               |   | 1       | 17      |
| 36                                   | Dakota Haller     | Javelin             | A8-3                | good flight   | 1       | 2.5     |
| 37                                   | Dakota Haller     | Gnome               | A10-3t              | separation  | 1       | 2.5     |
| 38                                   | Richard Haller    | Astrobee            | G64-7               | very nice flight  | 1       | 120     |
| 39                                   | Richard Haller    | Astrobee            | G64-7               |   | 1       | 120     |
| 40                                   | Richard Haller    | Penetrator          | C6-3                |   | 1       | 9       |
| 41                                   | Ken Jarosch       | 2X Solar Warrior    | C11-3               | first flight  | 1       | 9       |

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| #                                    | Name            | Rocket                  | Motor(s)            | Comment                             | Motors  | Impulse |
| 42                                   | Ken Jarosch     | Command Module          | A10-3t              | junkyard rocket                     | 1       | 2.5     |
| 43                                   | Ken Jarosch     | Borg Cube               | C5-3                | first flight                        | 1       | 9.5     |
| 44                                   | Ken Jarosch     | Katyscha Slim           | C11-3               | first flight                        | 1       | 9       |
| 45                                   | Ken Jarosch     | High Flying Jester      | C11-3               | first flight                        | 1       | 9       |
| 46                                   | Ken Jarosch     | Cloud Buster II         | A8-5                | streamer duration                   | 1       | 2.5     |
| 47                                   | Ken Jarosch     | Pip Squeak II           | A8-5                | streamer duration                   | 1       | 2.5     |
| 48                                   | Paul Jarosch    | Neon Tornado            | B6-6                | good flight                         | 1       | 5       |
| 49                                   | Paul Jarosch    | Strike Fighter          | C5-3                |                                     | 1       | 9.5     |
| 50                                   | Paul Jarosch    | Cruise Missile          | A3-4t               |                                     | 1       | 2.5     |
| 51                                   | Paul Jarosch    | Wacky Wiggler           | B4-4                | unstable                            | 1       | 5       |
| 52                                   | Paul Jarosch    | Antari                  | B6-6                |                                     | 1       | 5       |
| 53                                   | Ellison Lenz    | Starship Excalibur      | B6-4                | no chute                            | 1       | 5       |
| 54                                   | Ellison Lenz    | Maxi V2                 | G64-4               |                                     | 1       | 120     |
| 55                                   | Ellison Lenz    | Red Doom                | F21-6               |                                     | 1       | 55      |
| 56                                   | Ellison Lenz    | Spool                   | C6-5                | good flight                         | 1       | 9       |
| 57                                   | Ellison Lenz    | Spool                   | C6-5                |                                     | 1       | 9       |
| 58                                   | Ellison Lenz    | Stomp                   | [unknown] assumed B |                                     | 1       | 5       |
| 59                                   | Ellison Lenz    | Fat Boy                 | B6-4                |                                     | 1       | 5       |
| 60                                   | Ellison Lenz    | Fat Boy                 | C6-3                | lawn dart                           | 1       | 9       |
| 61                                   | Stuart Lenz     | Dueces Wild             | (2) B6-4            | good flight                         | 2       | 10      |
| 62                                   | Stuart Lenz     | U.S.S. Atlantis (clone) | C6-5                | good flight                         | 1       | 9       |
| 63                                   | Stuart Lenz     | Renegade Kitbash        | (2) B6-4            | good flight                         | 2       | 10      |
| 64                                   | Stuart Lenz     | Stuart's Oddest Rocket  | [unknown] assumed B |                                     | 1       | 5       |
| 65                                   | Stuart Lenz     | Long Overdue            | [unknown] assumed B |                                     | 1       | 5       |
| 66                                   | Stuart Lenz     | 2X Fat Boy              | F21-6               |                                     | 1       | 55      |
| 67                                   | Brett McDowell  | Big Daddy               | D12-5               | separation                          | 1       | 17      |
| 68                                   | TARC Team #2213 | MACH 9                  | (4) D12-0; E9-6     | tune-up flight                      | 5       | 97.5    |
| 69                                   | Mark Thell      | Cherokee                | C11-7               | first flight                        | 1       | 9       |
| 70                                   | Mark Thell      | Stomp                   | C6-7                |                                     | 1       | 9       |
| 71                                   | Mark Thell      | Renegade Kitbash        | D12-5               | good flight                         | 1       | 17      |
| 72                                   | Mark Thell      | Green Glider Carrier    | B6-4                | late eject, shuttle parasite glider | 1       | 5       |
| 73                                   | Rick Vatsaas    | Vinyl Pigskin           | [unknown] assumed A |                                     | 1       | 2.5     |
| 74                                   | Rick Vatsaas    | Big Bertha              | D12-7               |                                     | 1       | 17      |
| 75                                   | Rick Vatsaas    | Big Daddy               | D12-3               |                                     | 1       | 17      |
| 76                                   | Rick Vatsaas    | [unknown]               | D12-3               |                                     | 1       | 17      |
| 77                                   | Rick Vatsaas    | Vinyl Pigskin           | A3-4t               |                                     | 1       | 2.5     |
| 78                                   | David Whitaker  | Falcon                  | B6-4                | first flight                        | 1       | 5       |
| 79                                   | David Whitaker  | Mean Machine            | D12-5               | 2nd flight                          | 1       | 17      |
| 80                                   | David Whitaker  | TLP ASRAAM              | (2) D12-5           | 2nd flight                          | 2       | 34      |
| 81                                   | David Whitaker  | Geminee Thunder         | D12-3               | first flight                        | 1       | 17      |
| 82                                   | David Whitaker  | Tiny Pterodactyl        | F20-7               |                                     | 1       | 64      |

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| #                                    | Name           | Rocket  | Motor(s) | Motors    | Impulse     |
| 83                                   | David Whitaker | Mustang | E23-5    | 1         | 37          |
| <b>Total Flights: 83</b>             |                |         |          | <b>95</b> | <b>1505</b> |
| <b>Total Motors: 95</b>              |                |         |          |           |             |
| <b>Total Impulse (N-s): 1505</b>     |                |         |          |           |             |
| <b>Average Impulse (N-s): 15.8</b>   |                |         |          |           |             |
| <b>Motor Distribution</b>            |                |         |          |           |             |
| MM                                   | 0              |         |          |           |             |
| 1/4 A                                | 0              |         |          |           |             |
| 1/2A                                 | 0              |         |          |           |             |
| A                                    | 12             |         |          |           |             |
| B                                    | 27             |         |          |           |             |
| C                                    | 20             |         |          |           |             |
| D                                    | 25             |         |          |           |             |
| E                                    | 4              |         |          |           |             |
| F                                    | 4              |         |          |           |             |
| G                                    | 3              |         |          |           |             |
| H                                    | 0              |         |          |           |             |