

LAUNCH SUMMARY

total number of flights	103
total number of low power flights	46
total number of HPRLite flights	27
total number of high power flights	30
total single stage flights	98
total cluster flights	3
total multiple stage flights	2
total cluster/staged flights	0
total number of motors expended	113
total impulse expended	20962.7
total number of flyers	48
number of states represented	2
States OH, TX	

flight class		flights
U	0.000-0.000 Ns	0
1/8A	0.001-0.312 Ns	0
1/4A	0.312-0.625 Ns	0
1/2A	0.625-1.250 Ns	0
A	1.250-2.500 Ns	8
B	2.500-5.000 Ns	3
C	5-10 Ns	19
D	10-20 Ns	9
E	20-40 Ns	7
F	40-80 Ns	16
G	80-160 Ns	12
H	160-320 Ns	8
I	320-640 Ns	15
J	640-1280 Ns	3
K	1280-2560 Ns	3
L	2560-5120 Ns	0
M	5120-10240 Ns	0
N	10240-20480 Ns	0
O	20480-40960 Ns	0
totals		103

Top Ten Individual Flyers		number of flights
1.	Chris Bender	5
2.	Dawson	5
3.	Bill Gee	5
4.	Adam Amick	5
5.	David Smith	5
6.	Nikolas	5
7.	Harmony	4
8.	Jacob Mehr	4
9.	Tom Kelly	4
10.	Scott Cook	4

LAUNCH SUMMARY

Top Ten All-Around Flyers (individual + team)		number of flights
1.	Chris Bender	5
2.	Dawson	5
3.	Bill Gee	5
4.	Adam Amick	5
5.	David Smith	5
6.	Nikolas	5
7.	Harmony	4
8.	Jacob Mehr	4
9.	Tom Kelly	4
10.	Scott Cook	4

Top Ten Motor Users		number of motors
1.	Nikolas	9
2.	Chris Bender	6
3.	Chas Russell	6
4.	Dawson	5
5.	Bill Gee	5
6.	Adam Amick	5
7.	David Smith	5
8.	Harmony	4
9.	Jacob Mehr	4
10.	Wesley Bender	4

Top Ten Total Impulse Users		Tot Imp, N-s
1.	Loren	2373.4
2.	Scott Cook	2326.4
3.	Robert Vanover	2224.9
4.	Royce Frankum	1288.8
5.	David Smith	1246.6
6.	Chris Bender	823.3
7.	Tom Knapp	755.5
8.	Chuck Crabb	749.9
9.	Steve B	707.2
10.	Glenn Goeba	648.0

MOTOR USAGE

motor	type	TotImp (N-s)	prop wt (g)	single stage	cluster power	staged power	cluster staged	total usage
ES A10T	13mm SU	2.5	3.8	3	0	0	0	3
QU A6	18mm SU	2.5	3.5	1	0	0	0	1
ES A8	18mm SU	2.5	3.3	4	0	0	0	4
ES B6	18mm SU	5.0	5.6	3	0	1	0	4
ES C11	24mm SU	8.8	12.0	1	0	0	0	1
ES C6	18mm SU	9.0	10.8	18	11	2	0	31
ES D12	24mm SU	17.0	21.1	6	0	1	0	7
AT D21T	18mm SU	18.7	9.6	1	0	0	0	1
AT E20	24mm SU	35.0	16.2	1	0	0	0	1
AT E28T	24mm RL	40.0	18.4	1	0	0	0	1
AP E6	24mm SU	37.8	22.0	1	0	0	0	1
ES E9	24mm SU	27.9	35.8	2	0	0	0	2
ES F15	29mm SU	49.6	60.0	2	0	0	0	2
AT F24W	24mm RL	47.3	19.0	1	0	0	0	1
AT F26	29mm SU	62.2	43.1	3	0	0	0	3
ES F26	29mm SU	62.2	43.1	1	0	0	0	1
AT F39T	24mm RL	50.0	22.7	3	0	0	0	3
ES F50	29mm SU	76.8	37.9	2	0	0	0	2
AT F50T	29mm SU	80.0	37.9	2	0	0	0	2
AT F52T	29mm RL	80.0	36.6	1	0	0	0	1
AT G125	29mm SU	128.0	59.6	1	0	0	0	1
ES G40	29mm SU	97.1	53.8	1	0	0	0	1
AT G40W	29mm SU	114.1	55.1	2	0	0	0	2
AT G53	29mm RL	90.9	60.0	1	0	0	0	1
AT G64W	29mm RL	118.8	62.5	1	0	0	0	1
AT G76	29mm RL	118.0	60.0	2	0	0	0	2
ES G80	29mm SU	136.6	62.5	2	0	0	0	2
AT G80T	29mm SU	116.0	56.9	2	0	0	0	2
AT H128W	29mm RL	181.0	92.2	1	0	0	0	1
LK H160	38mm RL	260.1	120.0	1	0	0	0	1
AT H165	29mm RL	165.0	90.0	3	0	0	0	3
AT H182	29mm SU	218.0	115.0	1	0	0	0	1
CTI H225	38mm RL	273.2	123.6	1	0	0	0	1
AT H97J	29mm RL	169.0	140.9	1	0	0	0	1
AT I140T	54mm SU	579.2	327.2	5	0	0	0	5
AT I161W	38mm RL	329.2	187.5	1	0	0	0	1
CTI I195	38mm RL	369.2	204.9	1	0	0	0	1
AT I205	29mm SU	345.0	188.0	1	0	0	0	1
LK I210	38mm RL	489.8	240.0	1	0	0	0	1
AT I211W	38mm RL	435.9	250.0	1	0	0	0	1
CTI I216	38mm RL	636.1	312.5	1	0	0	0	1
AT I366	38mm RL	539.0	300.0	1	0	0	0	1
AT I500	38mm SU	620.0	312.0	2	0	0	0	2
AT I65W	54mm SU	636.1	369.7	1	0	0	0	1
CTI J1520	54mm RL	1092.5	537.0	1	0	0	0	1
CTI J285	38mm RL	648.0	312.5	1	0	0	0	1
AMW J400	0mm --	1280.0	0.0	1	0	0	0	1
AT K1275	54mm RL	2224.9	1222.0	1	0	0	0	1
CTI K360	54mm RL	1280.9	708.2	1	0	0	0	1
LK K960	54mm RL	1946.5	930.0	1	0	0	0	1
totals		20962.7		98	11	4	0	113

number of different motor types = 50

TOTAL FLIGHT SUMMARY

Rocketeer	Home Town	state	motor usage		model power		HPRLite		HPR		indiv total	team total
			Num	TotImp	ind	tm	ind	tm	ind	tm		
Dawson	Lewisville	TX	5	34.5	5	0	0	0	0	0	5	0
Gavin	Fort Worth	TX	1	369.2	0	0	0	0	1	0	1	0
Glenn	Keller	TX	1	636.1	0	0	0	0	1	0	1	0
Harmony	Sachse	TX	4	36.0	4	0	0	0	0	0	4	0
Loren	Fort Worth	TX	2	2373.4	0	0	0	0	2	0	2	0
Matthew	Fort Worth	TX	2	323.2	1	0	0	0	1	0	2	0
Nikolas	Frisco	TX	9	522.1	4	0	0	0	1	0	5	0
Sadef		TX	1	80.0	1	0	0	0	0	0	1	0
Steve		TX	1	579.2	0	0	0	0	1	0	1	0
Adam Amick	Little Elm	TX	5	170.7	5	0	0	0	0	0	5	0
Steve B	Frisco	TX	2	707.2	0	0	0	0	2	0	2	0
Sam Barone	Plano	TX	1	40.0	1	0	0	0	0	0	1	0
Casey Bender	Garland	TX	1	2.5	1	0	0	0	0	0	1	0
Chris Bender	Garland	TX	6	823.3	3	0	0	0	2	0	5	0
Wesley Bender	Garland	TX	4	44.0	3	0	0	0	0	0	3	0
Dawson Byrd	Lewisville	TX	1	2.5	1	0	0	0	0	0	1	0
Scott Cook	Fort Worth	TX	4	2326.4	1	0	0	0	3	0	4	0
Chuck Crabb		TX	2	749.9	0	0	0	0	2	0	2	0
Alex Demchalk	Frisco	TX	2	111.8	2	0	0	0	0	0	2	0
John Dyer	Dallas	TX	2	409.2	1	0	0	0	1	0	2	0
Royce Frankum	Poetry	TX	2	1288.8	1	0	0	0	1	0	2	0
Bill Gee	Plano	TX	5	45.0	5	0	0	0	0	0	5	0
Glenn Goeba	Keller	TX	1	648.0	0	0	0	0	1	0	1	0
Collin Henry	Hurst	TX	1	2.5	1	0	0	0	0	0	1	0
Lily Henry	Hurst	TX	1	2.5	1	0	0	0	0	0	1	0
Lauren Holder	Rowlett	TX	1	2.5	1	0	0	0	0	0	1	0
Tom Kelley	Fort Worth	TX	1	136.6	1	0	0	0	0	0	1	0
Tom Kelly	Fort Worth	TX	4	352.5	4	0	0	0	0	0	4	0
Tom Knapp	Bedford	TX	3	755.5	2	0	0	0	1	0	3	0
Brad McPeek	McKinney	TX	2	336.0	1	0	0	0	1	0	2	0
Sadaf Meckfessel	Fort Worth	TX	1	118.8	1	0	0	0	0	0	1	0
Jacob Mehr	Dallas	TX	4	177.5	4	0	0	0	0	0	4	0
Amado Pereira	Garland	TX	2	125.0	2	0	0	0	0	0	2	0
Jack Poehlman	Fort Worth	TX	1	579.2	0	0	0	0	1	0	1	0
Chas Russel	Fort Worth	TX	2	553.9	1	0	0	0	1	0	2	0
Chas Russell	Fort Worth	TX	6	102.6	3	0	0	0	0	0	3	0
Chas Russell	Hilliard	OH	2	14.0	1	0	0	0	0	0	1	0
David Schultz	Arlington	TX	3	203.0	2	0	0	0	1	0	3	0
Jeff Schwab	Plano	TX	1	636.1	0	0	0	0	1	0	1	0
Jeff Schwabb	Plano	TX	1	620.0	0	0	0	0	1	0	1	0
Mike Shaffer		TX	1	116.0	1	0	0	0	0	0	1	0
Dan Smith	Wataugo	TX	1	17.0	1	0	0	0	0	0	1	0
Dan Smith	Watauga	TX	2	26.0	2	0	0	0	0	0	2	0
David Smith	Allen	TX	5	1246.6	3	0	0	0	2	0	5	0
Robert Vanover	Crowley	TX	1	2224.9	0	0	0	0	0	1	0	1
William Vanover	Crowley	TX	0	0.0	0	0	0	0	0	1	0	1
Nick Viggiano	Dallas	TX	1	35.0	1	0	0	0	0	0	1	0
Kirk Wood	Sachse	TX	2	255.9	1	0	0	0	1	0	2	0
totals			113	20962.7	73	0.0	0	0.0	29	1.0	102	0.0

total number of flyers = 48

FLIGHT LOG

rocketeer(s)	stg	cls	type	TotImp	rocket	motor(s)	comment
Dawson	1		low A	2.5	U Silver Surfer	ES A8	
Adam Amick	1		low A	2.5	SR Thunderbee	ES A10	
Casey Bender	1		low A	2.5	RRR Red Bolt	QU A6	
Dawson Byrd	1		low A	2.5	QU Payloader 1	ES A8	
Collin Henry	1		low A	2.5	U, unknown	ES A8	
Lily Henry	1		low A	2.5	U, unknown	ES A8	
Lauren Holder	1		low A	2.5	AAR Cinco	ES A10	first launch
David Smith	1		Low A	2.5	ES Mosquito	ES A10	
Dawson	1		low B	5.0	U Bug Shuttle	ES B6	
Jacob Mehr	1		low B	5.0	SCR unknown	ES B6	
David Schultz	1		low B	5.0	SCR Sprint	ES B6	
Royce Frankum	1		low C	8.8	ES Sport	ES C11	payload
Dawson	1		low C	9.0	U Bug shuttle	ES C6	
Dawson	1		low C	9.0	QU Payloader 1	ES C6	
Dawson	1		low C	9.0	RRR White Wing	ES C6	
Harmony	1		Low C	9.0	ES Fat Boy	ES C6	
Harmony	1		Low C	9.0	ES Fat Boy	ES C6	
Harmony	1		low C	9.0	ES Astrobeam	ES C6	
Harmony	1		Low C	9.0	ES Fat Boy	ES C6	
Nikolas	1		low C	9.0	U Big Mula	ES C6	
Nikolas	1		low C	9.0	U Sky Hawker	ES C6	
Adam Amick	1		Low C	9.0	ES Patriot (4-fin)	ES C6	
Wesley Bender	1		low C	9.0	RRR Stratos	ES C6	
Wesley Bender	1		low C	9.0	ES Space Eagle	ES C6	
Bill Gee	1		low C	9.0	ES Make and Take	ES C6	towing 3 X 3 ft streamer
Bill Gee	1		low C	9.0	ES Make and Take	ES C6	towing 3 X 5 ft streamer
Bill Gee	1		low C	9.0	ES Make and Take	ES C6	towing 3 X 3 ft streamer
Bill Gee	1		low C	9.0	ES Make and Take	ES C6	towing 3 X 5 ft streamer
Dan Smith	1		low C	9.0	QU Super Bird	ES C6	towing 25 ft streamer
Chas Russell	2		low D	14.0	FL Frich n Frack	1 x ES C6, 1 x ES B6	
Adam Amick	1		Low D	17.0	ES Mean Machine	ES D12	
Chas Russell	1		low D	17.0	SR SLS Explorer	ES D12	
David Schultz	1		low D	17.0	ES Sprint XL	ES D12	
Dan Smith	1		low D	17.0	D Supper	ES D12	First supper roch
Dan Smith	1		low D	17.0	QU Mean Green	ES D12	
David Smith	1		Low D	17.0	ES Maxi Alpha 3	ES D12	
Chris Bender	1	*	Low D	18.0	ES Baby Bertha	2 x ES C6	
Jacob Mehr	1		low D	18.7	ES No Idea	AT D21	
Wesley Bender	2		low E	26.0	RO Super Chief 2	1 x ES D12, 1 x ES C6	
Amado Pereira	1		low E	27.9	ES QCC Explorer	ES E9	
David Smith	1		low E	27.9	ES Mega Mosquito	ES E9	
Nick Viggiano	1		Low E	35.0	ES D-Region Tomahawk	AT E20	3rd flight
Chas Russell	1	*	low E	36.0	ACE Mini-Allegro	4 x ES C6	
Jacob Mehr	1		low E	37.8	ES No Idea	AP E6	
Sam Barone	1		Low E	40.0	ES Mean Machine	AT E28	
Nikolas	1	*	Hlt F	45.0	LOC Big Nuke	5 x ES C6	
Chris Bender	1		Hlt F	47.3	ES R-region Tomahawk	AT F24	
Alex Demchalk	1		Hlt F	49.6	ES Majestic	ES F15	
Chas Russell	1		Hlt F	49.6	MC Screech	ES F15	
Matthew	1		Hlt F	50.0	AT Cheetah	AT F39	
Chris Bender	1		Hlt F	50.0	BAD Defender Mark 2	AT F39	
Scott Cook	1		Hlt F	50.0	ES Big Daddy	AT F39	
Tom Kelly	1		Hlt F	62.2	ES Leviathan	ES F26	
Adam Amick	1		Hlt F	62.2	LOC Graduator	AT F26	
Alex Demchalk	1		Hlt F	62.2	ES Majestic	AT F26	
Tom Knapp	1		Hlt F	62.2	ES Majestic	AT F26	

FLIGHT LOG

rocketeer(s)	stg	cls	type	TotImp	rocket	motor(s)	comment
Tom Kelly	1		Hlt F	76.8	ES mega Der Red Max	ES F50	
Tom Kelly	1		Hlt F	76.8	AT Wart-hog	ES F50	
Sadef	1		Hlt F	80.0	U Clutch	AT F52	
Adam Amick	1		Hlt F	80.0	PML Explorer	AT F50	
John Dyer	1		Hlt F	80.0	RRR Diamond Ring	AT F50	
Kirk Wood	1		Hlt G	90.9	WI Pink Lightning	AT G53	
Amado Pereira	1		Hlt G	97.1	ES Nike Smoke	ES G40	
Nikolas	1		Hlt G	114.1	U Big Momma	AT G40	
Tom Knapp	1		Hlt G	114.1	ES Party Zone	AT G40	
Jacob Mehr	1		Hlt G	116.0	U No Idea	AT G80	
Mike Shaffer	1		Hlt G	116.0	LOC Vulcanite H76	AT G80	
Brad McPeek	1		Hlt G	118.0	SCR 4" Stinger	AT G76	
Chas Russel	1		Hlt G	118.0	RRR P'Chuter Extreme XL	AT G76	
Sadaf Meckfessel	1		Hlt G	118.8	ES Leviathan	AT G64	
Steve B	1		HPR G	128.0	LOC Custom, Big Momma	AT G125	first flight
Tom Kelley	1		Hlt G	136.6	ES Nike Smoke	ES G80	
Tom Kelly	1		Hlt G	136.6	ES Partizon	ES G80	
Scott Cook	1		HPR H	165.0	SCR Der Red Max	AT H165	main at 300 ft
Scott Cook	1		HPR H	165.0	SCR Patriot	AT H165	
Kirk Wood	1		HPR H	165.0	WI Sport, Pink Lightning	AT H165	cert flight
Chris Bender	1		HPR H	169.0	ES Nike Smoke	AT H97	
David Schultz	1		HPR H	181.0	PML Explorer	AT H128	
Brad McPeek	1		HPR H	218.0	SCR 4" Stinger	AT H182	
Chuck Crabb	1		HPR H	260.1	SCR 30-30	LK H160	
Matthew	1		HPR H	273.2	WI Darkstar	CTI H225	cert flight
John Dyer	1		HPR I	329.2	MC Torrent	AT I161	dual deploy - main @
Nikolas	1		HPR I	345.0	LOC Norad Pro	AT I205	
Gavin	1		HPR I	369.2	LOC Big Cleatus, Green Thunder	CTI I195	
Chas Russel	1		HPR I	435.9	DGA Arrow, Buckeye Booster	AT I211	Scarlet & Gray, Jack
Chuck Crabb	1		HPR I	489.8	SCR Scotch 3X	LK I210	dual deploy - main @
Chris Bender	1		HPR I	539.0	SCR Cherokee-I	AT I366	drogue at apogee, cab
Steve	1		HPR I	579.2	SCR Custom, Big Momma	AT I140	
Steve B	1		HPR I	579.2	LOC Hyperlock 835	AT I140	
Tom Knapp	1		HPR I	579.2	MC Patriot	AT I140	thrust ring failed
Jack Poehlman	1		HPR I	579.2	LOC 3.1 Custom	AT I140	cert flight
David Smith	1		HPR I	579.2	MC Torrent	AT I140	dual deploy
Jeff Schwabb	1		HPR I	620.0	LOC EZI-65	AT I500	
David Smith	1		HPR I	620.0	MC Torrent	AT I500	
Glenn	1		HPR I	636.1	LOC V2	CTI I216	cert flight
Jeff Schwab	1		HPR I	636.1	LOC EZI-65	AT I65	
Glenn Goeba	1		HPR J	648.0	LOC V-2, Black Mamba	CTI J285	level 2 cert
Loren	1		HPR J	1092.5	LOC Bruiser	CTI J1520	
Royce Frankum	1		HPR J	1280.0	SCR Sport, Ole Miss	AMW J400	
Loren	1		HPR K	1280.9	LOC Big Nuke	CTI K360	
Scott Cook	1		HPR K	1946.5	SCR 6" Phoenix	LK K960	main at 700 ft
Robert Vanover and William Vanover	1		HPR K	2224.9	MC Pike	AT K1275	

total flights = 103

ROCKET KIT TYPE SUMMARY

Manufacturer	Model	Name	wt,oz	len,in	dia,in	flts
Art Applewhite Rockets	Cinco *		0.0	0.0	0.0	1
ACE Aeronautics	Mini-Allegro *		0.0	0.0	0.0	1
Aerotech	Cheetah		10.0	32.0	1.9	1
Aerotech	Wart-hog		14.0	37.0	2.6	1
Badd Azz Rocketry	Defender Mark 2 *		0.0	0.0	0.0	1
Unknown	Supper *		0.0	0.0	0.0	1
DG&A	Arrow	Buckeye Booster	65.0	46.0	4.0	1
Estes Industries, Inc.	Astrobeam *		0.0	0.0	0.0	1
Estes Industries, Inc.	Baby Bertha		1.9	12.8	1.6	1
Estes Industries, Inc.	Big Daddy *		0.0	0.0	0.0	1
Estes Industries, Inc.	D-Region Tomahawk		3.7	35.5	1.6	1
Estes Industries, Inc.	Fat Boy		3.0	12.5	2.6	3
Estes Industries, Inc.	Leviathan		17.5	41.5	3.0	2
Estes Industries, Inc.	Majestic *		0.0	0.0	0.0	3
Estes Industries, Inc.	Make and Take *		0.0	0.0	0.0	5
Estes Industries, Inc.	Maxi Alpha 3		7.4	33.2	2.6	1
Estes Industries, Inc.	Mean Machine		5.8	78.8	1.6	2
Estes Industries, Inc.	Mega Mosquito *		0.0	0.0	0.0	1
Estes Industries, Inc.	Mosquito		0.1	3.9	0.5	1
Estes Industries, Inc.	Nike Smoke *		0.0	0.0	0.0	3
Estes Industries, Inc.	No Idea *		0.0	0.0	0.0	2
Estes Industries, Inc.	Partizon *		0.0	0.0	0.0	1
Estes Industries, Inc.	Party Zone *		0.0	0.0	0.0	1
Estes Industries, Inc.	Patriot (4-fin)		1.5	21.2	1.6	1
Estes Industries, Inc.	QCC Explorer *		0.0	0.0	0.0	1
Estes Industries, Inc.	R-region Tomahawk *		0.0	0.0	0.0	1
Estes Industries, Inc.	Space Eagle *		0.0	0.0	0.0	1
Estes Industries, Inc.	Sport *		0.0	0.0	0.0	1
Estes Industries, Inc.	Sprint XL *		0.0	0.0	0.0	1
Estes Industries, Inc.	mega Der Red Max *		0.0	0.0	0.0	1
Flis Kits	Frich n Frack *		0.0	0.0	0.0	1
LOC/Precision	3.1 Custom *		0.0	0.0	0.0	1
LOC/Precision	Big Cleatus *	Green Thunder	0.0	0.0	0.0	1
LOC/Precision	Big Nuke *		0.0	0.0	0.0	2
LOC/Precision	Bruiser		124.0	82.8	7.7	1
LOC/Precision	Custom *	Big Momma	0.0	0.0	0.0	1
LOC/Precision	EZI-65		35.0	56.5	4.0	2
LOC/Precision	Graduator		13.0	39.5	2.6	1
LOC/Precision	Hyperlock 835 *		0.0	0.0	0.0	1
LOC/Precision	Norad Pro *		0.0	0.0	0.0	1
LOC/Precision	V-2 *	Black Mamba	0.0	0.0	0.0	1
LOC/Precision	V2 *		0.0	0.0	0.0	1
LOC/Precision	Vulcanite H76		23.0	53.3	2.3	1
Madcow	Patriot *		0.0	0.0	0.0	1
Madcow	Pike *		0.0	0.0	0.0	1
Madcow	Screech *		0.0	0.0	0.0	1
Madcow	Torrent *		0.0	0.0	0.0	3
Public Missiles Limited	Explorer		30.7	45.5	2.7	2
Quest	Mean Green *		0.0	0.0	0.0	1
Quest	Payloader 1 *		0.0	0.0	0.0	2
Quest	SUPer Bird *		0.0	0.0	0.0	1
Rocketarium	Super Chief 2 *		0.0	0.0	0.0	1
Red River Rocketry	Diamond Ring *		0.0	0.0	0.0	1
Red River Rocketry	P'Chuter Extreme XL *		0.0	0.0	0.0	1
Red River Rocketry	Red Bolt *		0.0	0.0	0.0	1
Red River Rocketry	Stratos *		0.0	0.0	0.0	1
Red River Rocketry	White Wing *		0.0	0.0	0.0	1
SEMROC	SLS Explorer *		0.0	0.0	0.0	1
SEMROC	Thunderbee *		0.0	0.0	0.0	1

ROCKET KIT TYPE SUMMARY

Manufacturer	Model	Name	wt,oz	len,in	dia,in	flts
Unknown	*	unknown	0.0	0.0	0.0	2
Unknown	Big Momma *		0.0	0.0	0.0	1
Unknown	Big Mula *		0.0	0.0	0.0	1
Unknown	Bug Shuttle *		0.0	0.0	0.0	1
Unknown	Bug shuttle *		0.0	0.0	0.0	1
Unknown	Clutch *		0.0	0.0	0.0	1
Unknown	No Idea *		0.0	0.0	0.0	1
Unknown	Silver Surfer *		0.0	0.0	0.0	1
Unknown	Sky Hawker *		0.0	0.0	0.0	1
Wildman	Darkstar *		0.0	0.0	0.0	1
Wildman	Pink Lightning *		0.0	0.0	0.0	1
Wildman	Sport *	Pink Lightning	0.0	0.0	0.0	1

total number of kit rocket types = 71

SCRATCH BUILT SUMMARY

Rocketeer	Model	Name	wt,oz	len,in	dia,in	flts
Chuck Crabb	30-30		0.0	0.0	0.0	1
Brad McPeck	4" Stinger		0.0	0.0	0.0	2
Scott Cook	6" Phoenix		0.0	0.0	0.0	1
Chris Bender	Cherokee-I		0.0	0.0	0.0	1
Steve	Custom	Big Momma	0.0	0.0	0.0	1
Scott Cook	Der Red Max		0.0	0.0	0.0	1
Scott Cook	Patriot		0.0	0.0	0.0	1
Chuck Crabb	Scotch 3X		0.0	0.0	0.0	1
Royce Frankum	Sport	Ole Miss	0.0	0.0	0.0	1
David Schultz	Sprint		0.0	0.0	0.0	1
Jacob Mehr	unknown		0.0	0.0	0.0	1

total number of scratch rocket types = 11

MANUFACTURER SUMMARY

Abbrev	Manufacturer	Number motors used	Flights using motors	Flights using airframe
U	Unknown	1	1	11
AAR	Art Applewhite Rockets	0	0	1
ACE	ACE Aeronautics	0	0	1
AP	Apogee	1	1	0
AT	Aerotech	41	41	2
BAD	Badd Azz Rocketry	0	0	1
CTI	Cesaroni Technology Inc.	6	6	0
DGA	DG&A	0	0	1
ES	Estes Industries, Inc.	60	50	36
FL	Flis Kits	0	0	1
LK	Loki	3	3	0
LOC	LOC/Precision	0	0	14
MC	Madcow	0	0	6
PML	Public Missiles Limited	0	0	2
QU	Quest	1	1	4
RO	Rocketarium	0	0	1
RRR	Red River Rocketry	0	0	5
SR	SEMROC	0	0	2
WI	Wildman	0	0	3
	scratch built			12
	totals	113	103	103

number of manufacturers = 19