

LAUNCH SUMMARY

total number of flights	60
total number of low power flights	38
total number of HPRlite flights	8
total number of high power flights	14
total single stage flights	57
total cluster flights	3
total multiple stage flights	0
total cluster/staged flights	0
total number of motors expended	65
total impulse expended	6234.0
total number of flyers	19
number of states represented	1
States 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	3
B	2.500-5.000 Ns	4
C	5-10 Ns	10
D	10-20 Ns	17
E	20-40 Ns	4
F	40-80 Ns	3
G	80-160 Ns	7
H	160-320 Ns	5
I	320-640 Ns	5
J	640-1280 Ns	2
K	1280-2560 Ns	0
L	2560-5120 Ns	0
M	5120-10240 Ns	0
N	10240-20480 Ns	0
O	20480-40960 Ns	0
totals		60

	Top Ten Individual Flyers	number of flights
1.	Al Yunker	8
2.	Joe Boclair	8
3.	Laird Hanson	6
4.	Keith Pate	4
5.	Chuck Crabb	4
6.	Kevin Patton	3
7.	John Dyer	3
8.	Wesley Bender	3
9.	Casey Bender	3
10.	Steve Pierce	3

LAUNCH SUMMARY

Top Ten All-Around Flyers (individual + team)		number of flights
1.	Al Yunker	8
2.	Joe Bocclair	8
3.	Laird Hanson	6
4.	Keith Pate	4
5.	Chuck Crabb	4
6.	Kevin Patton	3
7.	John Dyer	3
8.	Wesley Bender	3
9.	Casey Bender	3
10.	Steve Pierce	3

Top Ten Motor Users		number of motors
1.	Joe Bocclair	11
2.	Al Yunker	9
3.	Laird Hanson	6
4.	Steve Pierce	4
5.	Keith Pate	4
6.	Chuck Crabb	4
7.	Kevin Patton	3
8.	John Dyer	3
9.	Wesley Bender	3
10.	Casey Bender	3

Top Ten Total Impulse Users		Tot Imp, N-s
1.	Chuck Crabb	1702.8
2.	George Sprague	800.9
3.	Keith Pate	723.4
4.	David Schultz	552.0
5.	Kevin Patton	467.9
6.	Jeff Jones	467.0
7.	Mike Sebesta	321.5
8.	Joe Bocclair	317.3
9.	Chris Bender	226.1
10.	Al Yunker	146.6

MOTOR USAGE

motor	type	TotImp (N-s)	prop wt (g)	single stage	cluster power	staged power	cluster staged	total usage
ES A3T	13mm SU	2.5	3.3	2	0	0	0	2
ES A8	18mm SU	2.5	3.3	1	0	0	0	1
ES B4	18mm SU	5.0	6.0	0	4	0	0	4
ES B6	18mm SU	5.0	5.6	4	0	0	0	4
ES C11	24mm SU	8.8	12.0	2	0	0	0	2
ES C6	18mm SU	9.0	10.8	8	2	0	0	10
AT D10	18mm SU	18.8	9.8	1	0	0	0	1
ES D12	24mm SU	17.0	21.1	14	2	0	0	16
AT E15W	24mm SU	38.4	17.8	1	0	0	0	1
ES E9	24mm SU	27.9	35.8	2	0	0	0	2
AT F35	24mm RL	57.1	30.0	1	0	0	0	1
ES F50	29mm SU	76.8	37.9	1	0	0	0	1
AT F52T	29mm RL	80.0	36.6	1	0	0	0	1
AT G104T	29mm RL	90.0	40.8	1	0	0	0	1
AT G125	29mm SU	128.0	59.6	1	0	0	0	1
CTI G125	29mm RL	159.6	81.9	1	0	0	0	1
AT G40W	29mm SU	114.1	55.1	2	0	0	0	2
AT G64W	29mm RL	118.8	62.5	1	0	0	0	1
AT G80T	29mm SU	116.0	56.9	1	0	0	0	1
AT H135	29mm SU	225.8	82.0	1	0	0	0	1
LK H144	38mm RL	239.2	126.0	1	0	0	0	1
AT H165	29mm RL	165.0	90.0	1	0	0	0	1
AT H238T	29mm RL	161.9	79.8	1	0	0	0	1
AT H97J	29mm RL	169.0	140.9	1	0	0	0	1
CTI I205	38mm RL	380.9	206.1	1	0	0	0	1
AT I245	38mm RL	351.0	181.3	1	0	0	0	1
AT I284W	38mm RL	552.0	312.5	1	0	0	0	1
AT I285	38mm RL	420.0	230.2	1	0	0	0	1
AT I59	38mm RL	486.0	272.0	1	0	0	0	1
AT J425	38mm SU	676.0	364.0	1	0	0	0	1
AT J460T	54mm RL	812.6	390.2	1	0	0	0	1
totals		6234.0		57	8	0	0	65

number of different motor types = 31

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		
Casey Bender	Garland	TX	3	27.0	3	0	0	0	0	0	3	0
Chris Bender	Garland	TX	2	226.1	1	0	0	0	1	0	2	0
Wesley Bender	Garland	TX	3	39.4	3	0	0	0	0	0	3	0
Joe Boclair	Trophy Club	TX	11	317.3	8	0	0	0	0	0	8	0
Chuck Crabb	Flower Mound	TX	4	1702.8	0	0	0	0	4	0	4	0
Jarrett Drough	Arlington	TX	1	90.0	0	0	0	0	1	0	1	0
John Dyer	Dallas	TX	3	30.8	3	0	0	0	0	0	3	0
Laird Hanson	Dallas	TX	6	46.0	6	0	0	0	0	0	6	0
Jeff Jones	Keller	TX	2	467.0	1	0	0	0	1	0	2	0
David King	Ft. Worth	TX	2	121.3	2	0	0	0	0	0	2	0
Michael King	Ft. Worth	TX	1	17.0	1	0	0	0	0	0	1	0
Keith Pate	Bowie	TX	4	723.4	3	0	0	0	1	0	4	0
Kevin Patton	Arlington	TX	3	467.9	1	0	0	0	2	0	3	0
Steve Pierce	Aubry	TX	4	103.0	3	0	0	0	0	0	3	0
Annie Scheidemantle	Midlothian	TX	2	34.0	2	0	0	0	0	0	2	0
David Schultz	Arlington	TX	1	552.0	0	0	0	0	1	0	1	0
Mike Sebesta	Dallas	TX	2	321.5	0	0	0	0	2	0	2	0
George Sprague	Mesquite	TX	2	800.9	0	0	0	0	2	0	2	0
Al Yunker	The Colony	TX	9	146.6	8	0	0	0	0	0	8	0
totals			65	6234.0	45	0.0	0	0.0	15	0.0	60	0.0

total number of flyers = 19

FLIGHT LOG

rocketeer(s)	stg	cls	type	TotImp	rocket	motor(s)	comment
Wesley Bender	1		low A	2.5	AAR CINCO	ES A3	
David King	1		low A	2.5	ES Aerospace	ES A3	
Keith Pate	1		low A	2.5	SCR Boost Glider	ES A8	
John Dyer	1		low B	5.0	CMR Manta	ES B6	
Laird Hanson	1		Low B	5.0	ES Rascal	ES B6	
Laird Hanson	1		low B	5.0	ES HiJinks	ES B6	
Steve Pierce	1		low B	5.0	ES Skydart	ES B6	
John Dyer	1		low C	8.8	SR Aerodart	ES C11	
Al Yunker	1		low C	8.8	CSR Firecracker	ES C11	
Casey Bender	1		low C	9.0	ES Prospector	ES C6	
Casey Bender	1		Low C	9.0	ES Patriot (4-fin)	ES C6	
Casey Bender	1		low C	9.0	AAR X-fire	ES C6	
Wesley Bender	1		Low C	9.0	ES Patriot (4-fin)	ES C6	
Laird Hanson	1		Low C	9.0	ES Rascal	ES C6	
Laird Hanson	1		low C	9.0	ES Hijinks	ES C6	
Laird Hanson	1		Low C	9.0	ES Rascal	ES C6	
Laird Hanson	1		Low C	9.0	ES Rascal	ES C6	
Joe Boclair	1		low D	17.0	ES Prowler	ES D12	
Joe Boclair	1		low D	17.0	FL Acme Spitfire	ES D12	
Joe Boclair	1		low D	17.0	ES Mega Mosquito	ES D12	
Joe Boclair	1		low D	17.0	FL Nantucket Sound	ES D12	
John Dyer	1		low D	17.0	ES Canadian Arrow	ES D12	
Michael King	1		low D	17.0	ES Mensorie	ES D12	
Keith Pate	1		Low D	17.0	ES Scrambler	ES D12	contains real raw egg
Annie Scheidemantle	1		low D	17.0	SCR More Paint	ES D12	
Annie Scheidemantle	1		low D	17.0	SCR Needs Paint	ES D12	
Al Yunker	1		low D	17.0	SCR Spare Parts	ES D12	first flight
Al Yunker	1		low D	17.0	SCR Spare Parts	ES D12	
Al Yunker	1		low D	17.0	ES Mega Mosquito	ES D12	
Al Yunker	1		low D	17.0	ES Expedition	ES D12	
Al Yunker	1		low D	17.0	SCR Spare Parts	ES D12	
Steve Pierce	1	*	low D	18.0	SCR Deuces Wild	2 x ES C6	
Al Yunker	1		low D	18.8	SCR Red Tail	AT D10	
Joe Boclair	1	*	low D	20.0	QU Quad Runner	4 x ES B4	
Wesley Bender	1		low E	27.9	QU Harpoon	ES E9	
Keith Pate	1		low E	27.9	SCR Saucer	ES E9	
Al Yunker	1	*	low E	34.0	SCR XV	2 x ES D12	
Joe Boclair	1		low E	38.4	SCR Sparkles	AT E15	
Chris Bender	1		Hlt F	57.1	ES D-Region Tomahawk	AT F35	
Joe Boclair	1		Hlt F	76.8	ES Partizon	ES F50	
Steve Pierce	1		Hlt F	80.0	RRR Merlin	AT F52	Amazon Prime Rocket Deliv
Jarrett Drough	1		Hlt G	90.0	LOC Onyx	AT G104	
Joe Boclair	1		Hlt G	114.1	ES Mega Der Red Max	AT G40	
Kevin Patton	1		Hlt G	114.1	ES Nike Smoke	AT G40	
Jeff Jones	1		Hlt G	116.0	MC DX3	AT G80	
David King	1		Hlt G	118.8	AT Arreaux	AT G64	
Kevin Patton	1		HPR G	128.0	ES Leviathon	AT G125	
Mike Sebesta	1		HPR G	159.6	LOC IV - upscale Executioner	CTI G125	chute release
Mike Sebesta	1		HPR H	161.9	LOC IV - upscale Executioner	AT H238	chute release at 400 feet
Chuck Crabb	1		HPR H	165.0	SCR Cougar	AT H165	
Chris Bender	1		HPR H	169.0	ES Ventris	AT H97	Camera - Smile!
Kevin Patton	1		HPR H	225.8	PML Amraam	AT H135	certification flight
Chuck Crabb	1		HPR H	239.2	AAR Saucer	LK H144	
Jeff Jones	1		HPR I	351.0	MC Go Devel 38	AT I245	
George Sprague	1		HPR I	380.9	LOC Caliber ISP	CTI I205	700 feet main
George Sprague	1		HPR I	420.0	LOC V2	AT I285	
Chuck Crabb	1		HPR I	486.0	SCR Flamethrower	AT I59	Long burn - 6000 feet
David Schultz	1		HPR I	552.0	SCR Assault Breaker	AT I284	

FLIGHT LOG

rocketeer(s)	stg	cls	type	TotImp	rocket	motor(s)	comment
Keith Pate	1		HPR J	676.0	PML Black Brandt	AT J425	Dual deploy
Chuck Crabb	1		HPR J	812.6	SCR XXXL	AT J460	

total flights = 60

ROCKET KIT TYPE SUMMARY

Manufacturer	Model	Name	wt,oz	len,in	dia,in	fts
Art Applewhite Rockets	CINCO *		0.0	0.0	0.0	1
Art Applewhite Rockets	Saucer *		0.0	0.0	0.0	1
Art Applewhite Rockets	X-fire *		0.0	0.0	0.0	1
Aerotech	Arreaux		12.0	43.0	1.9	1
Unknown	Manta *		0.0	0.0	0.0	1
Unknown	Firecracker *		0.0	0.0	0.0	1
Estes Industries, Inc.	Aerospace *		0.0	0.0	0.0	1
Estes Industries, Inc.	Canadian Arrow *		0.0	0.0	0.0	1
Estes Industries, Inc.	D-Region Tomahawk		3.7	35.5	1.6	1
Estes Industries, Inc.	Expedition *		0.0	0.0	0.0	1
Estes Industries, Inc.	HiJinks *		0.0	0.0	0.0	1
Estes Industries, Inc.	Hijinks *		0.0	0.0	0.0	1
Estes Industries, Inc.	Leviathon *		0.0	0.0	0.0	1
Estes Industries, Inc.	Mega Der Red Max		31.0	40.0	4.0	1
Estes Industries, Inc.	Mega Mosquito *		0.0	0.0	0.0	2
Estes Industries, Inc.	Mensorie *		0.0	0.0	0.0	1
Estes Industries, Inc.	Nike Smoke *		0.0	0.0	0.0	1
Estes Industries, Inc.	Partizon *		0.0	0.0	0.0	1
Estes Industries, Inc.	Patriot (4-fin)		1.5	21.2	1.6	2
Estes Industries, Inc.	Prospector *		0.0	0.0	0.0	1
Estes Industries, Inc.	Prowler *		0.0	0.0	0.0	1
Estes Industries, Inc.	Rascal		1.5	13.6	1.6	4
Estes Industries, Inc.	Scrambler		2.5	21.5	2.0	1
Estes Industries, Inc.	Skydart *		0.0	0.0	0.0	1
Estes Industries, Inc.	Ventris *		0.0	0.0	0.0	1
Flis Kits	Acme Spitfire *		0.0	0.0	0.0	1
Flis Kits	Nantucket Sound *		0.0	0.0	0.0	1
LOC/Precision	Caliber ISP		29.0	59.2	3.1	1
LOC/Precision	IV - upscale Executioner *		0.0	0.0	0.0	2
LOC/Precision	Onyx		13.0	25.2	3.1	1
LOC/Precision	V2 *		0.0	0.0	0.0	1
Madcow	DX3 *		0.0	0.0	0.0	1
Madcow	Go Devel 38 *		0.0	0.0	0.0	1
Public Missiles Limited	Amraam *		0.0	0.0	0.0	1
Public Missiles Limited	Black Brandt *		0.0	0.0	0.0	1
Quest	Harpoon *		0.0	0.0	0.0	1
Quest	Quad Runner *		0.0	0.0	0.0	1
Red River Rocketry	Merlin *		0.0	0.0	0.0	1
SEMROC	Aerodart *		0.0	0.0	0.0	1

total number of kit rocket types = 39

SCRATCH BUILT SUMMARY

Rocketeer	Model	Name	wt,oz	len,in	dia,in	flts
David Schultz	Assault Breaker		0.0	0.0	0.0	1
Keith Pate	Boost Glider		0.0	0.0	0.0	1
Chuck Crabb	Cougar		0.0	0.0	0.0	1
Steve Pierce	Deuces Wild		0.0	0.0	0.0	1
Chuck Crabb	Flamethrower		0.0	0.0	0.0	1
Annie Scheidemantle	More Paint		0.0	0.0	0.0	1
Annie Scheidemantle	Needs Paint		0.0	0.0	0.0	1
Al Yunker	Red Tail		0.0	0.0	0.0	1
Keith Pate	Saucer		0.0	0.0	0.0	1
Al Yunker	Spare Parts		0.0	0.0	0.0	3
Joe Boclair	Sparkles		0.0	0.0	0.0	1
Al Yunker	XV		0.0	0.0	0.0	1
Chuck Crabb	XXXL		0.0	0.0	0.0	1

total number of scratch rocket types = 13

MANUFACTURER SUMMARY

Abbrev	Manufacturer	Number motors used	Flights using motors	Flights using airframe
U	Unknown	0	0	2
AAR	Art Applewhite Rockets	0	0	3
AT	Aerotech	20	20	1
CTI	Cesaroni Technology Inc.	2	2	0
ES	Estes Industries, Inc.	42	37	24
FL	Flis Kits	0	0	2
LK	Loki	1	1	0
LOC	LOC/Precision	0	0	5
MC	Madcow	0	0	2
PML	Public Missiles Limited	0	0	2
QU	Quest	0	0	2
RRR	Red River Rocketry	0	0	1
SR	SEMROC	0	0	1
	scratch built			15
	totals	65	60	60

number of manufacturers = 13