NASA CONTRACTOR REPORT 177336

EXPERIMENTAL STUDY OF MAIN ROTOR TIP GEOMETRY AND TAIL ROTOR INTERAGTIONS IN HOVER. VOL II - RUN LOG AND TABULATED DATA

D. T. Balch and J. Lombardi

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National Aeronautics and
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TEST RUN LOG

RUN #	MAIN ROTOR	MR M_t	Z/R	MR TIP	TAIL ROTOR MODE	TEST PLAN I.D. #	REMARKS
1	BLACK HAWK	0.55	3.0	20° Sweep	-	2	
2		0.60				1	
3		0.55				2	Repeat Run 1
4		0.65				3	
5		0.6	1.2			4	
6		0.6	0.75			5	
7		0.6	3.0				Run without radius extenders.
8		0.6				1	Repeat of Run 2 with improved track.
9		0.3					
10		0.4					
11		0.5					
12	H-34L	0.6	3.0	Rectangular	-	-	Calibration check rotor.
13		0.3				-	
14		0.4				-	
15		0.55				-	
16		0.65				-	Discovered bad card in NEFF data system. All above runs re-scheduled.
17	S-76	0.6	3.0	Swept, Tapered	-	31	First run with new NEFF card.
18		0.55				32	
19		0.65				33	
20		0.6	1.2			34	
21		0.3	3.0			-	
22		0.4	3.0		-	-	
23		0.6	0.75			35	

TEST RUN LOG (Continued)

RUN #	MAIN ROTOR	MR M_t	Z/R	MR TIP	TAIL ROTOR MODE	TEST PLAN I.D. #	REMARKS
24	H-34L	0.6	3.0	Rectangular	-	-	Calibration Run
25	BLACK HAWK	0.6	3.0	Double Swept	-	6	
26		0.55				7	
27		0.65				8	
28		0.6	0.75			10	
29		0.6	1.2			9	
30	H-34L	0.6	3.0	Rectangular	-	-	Gusty wind.
31		0.6					Possible end zero error.
32		0.6					Calibration Run
33	S-76	0.6	3.0	20° Sweep	-	21	Gusts to 24 Kts
34		0.6				21	Gusts to 24 Kts
35		0.6	0.75			25	High residual loading
36		0.6	0.75			25	Repeat Run 35
37		0.6	1.2			24	
38		0.65	3.0			23	
39		0.6				21	Repeat Runs 33 and 34
40		0.55				22	
41	H-34L	0.6	3.0	Rectangular	-	-	Calibration Run
42	BLACK HAWK	0.6	0.75	Double Swept with Anhedral	-	15	
43		0.6	1.2			14	
44		0.6	3.0			11	
45		0.65				13	
46		0.55				12	Gusty wind
47		0.6				11	Gusty wind. Repeat Run 44.

TEST RUN LOG (Continued)

RUN #	MAIN ROTOR	MR M_t	Z/R	MR TIP	TAIL ROTOR MODE	TEST PLAN I.D. #	REMARKS
48	BLACK HAWK	0.55		Double Swept with Anhedral		12	Repeat Run 46
49		0.6					Doors open
50	H-34L	0.6	3.0	Rectangular	-	-	Calibration Run
51	S-76	0.6	0.75	Rectangular	-	20	Gusty winds
52		0.6	1.2			19	Tip damaged during run.
53		0.6	1.2			19	Repeat Run 52
54		0.6	3.0			16	
55		0.65				18	
56		0.55				17	
57		0.6	0.75			20	Repeat Run 51
58		0.6	1.2			19	Repeat Runs 52, 53
59	H-34L	0.6	3.0	Rectangular		-	Calibration Run
60	BLACK HAWK	0.6	3.0	20° Sweep	-	1	Repeat Run 2
61		0.65				3	Repeat Run 4
62		0.55				2	Repeat Runs 1 and 3
63		0.6				-	High residual loads. Doors open
64		0.6				-	Doors open Repeat Run 63
65		0.6	0.75			5	Repeat Run 6
66		0.6	1.2			4	Repeat Run 5
67	H-34L	0.6	0.78	Rectangular	-	-	Calibration Run
68		0.6	1.2				Calibration Run
69		0.6	3.0				Calibration Run

TEST RUN LOG (Continued)

RUN #	MAIN ROTOR	MR M_t	Z/R	MR TIP	TAIL ROTOR MODE	TEST PLAN I.D. #	REMARKS
70	S-76	~~0.6~~	0.75	60% Taper		30	
71		0.6	1.2			29	
72		0.55	3.0			27	
73		0.6				26	
74		0.65				28	
75	H-34L	0.6	.2			-	Repeat Run 68
76		0.6	3.0				Calibration Run
77	S-76	0.55	3.0	Swept, Tapered with Anhedral	-	37	
78		0.6				36	
79		0.65				38	
80		0.55				37	Repeat Run 77
81		0.6	1.2			39	
82		0.6	0.75			40	
83	-	0.55	0.75		Pusher	-	Tail Rotor only
84		0.6	0.75			-	
85		0.55	3.0			-	
86		0.6				-	
87		0.65				-	
88	S-76	0.55	3.0	Swept, Tapered with Anhedral	Pusher	77	Tail Rotor pitch problems.
89		0.55				77	Repeat Run 88
90		0.6				76	
91		0.65				78	
92		0.6	1.2			79	
93		0.6	0.75			80	

TEST RUN LOG (Continued)

RUN #	MAIN ROTOR	MR M_t	Z/R	MR TIP	TAIL ROTOR MODE	TEST PLAN I.D. #	REMARKS
94	H-34L	0.6	3.0	Rectangular	Pusher	-	Calibration Run
95	H-34L	0.6	3.0	Rectangular	-	-	High Winds Calibration Run
96		0.6					Calibration Run
97	H-34L	0.6	3.0	Rectangular	-	-	First run after Rig Mods
98		0.6					Gusty winds Calibration Run
99		0.6	0.78			-	Calibration Run
100		0.6	3.0			-	Calibration Run
101		-					Check Run
102		-					Check Run
103		-					Check Run
104		0.6	3.0			-	Varidrive Calibration Run
105		0.6				-	Calibration Run
106	-	0.6	3.0		Pusher	-	Tail Rotor only Repeat Run 86
107	S-76	0.6	3.0	Swept, Tapered with Anhedral	-	36	Repeat Run 78
108	S-76	0.6	3.0	Swept, Tapered with Anhedral	Pusher	76	Repeat Run 90
109	-	0.55	3.0		Tractor	-	Tail Rotor only
110		0.6				-	
111		0.65				-	

TEST RUN LOG

RUN #	MAIN ROTOR	MR M_t	Z/R	MR TIP	TAIL ROTOR MODE	TEST PLAN I.D. #	REMARKS
112	S-76	~~0.55~~	0.3	Swept, Tapered with Anhedral	Tractor	72	
113		0.6				71	
114		0.65				73	
115		0.6	1.2			74	
116		0.6	0.75			75	
117	H-34L	0.6	3.0	Rectangular	-	-	Calibration Run
118	BLACK HAWK	0.6	3.0	Double Swept	-	6	Repeat Run 25
119	BLACK HAWK	0.55	3.0	Double Swept	Tractor	42	
120		0.6				41	
121		0.65				43	
122		0.6	1.2			44	
123		0.6	0.75			45	
124	BLACK HAWK	0.55	3.0	Double Swept	Pusher	47	
125		0.6				46	
126		0.65				48	
127		0.6	1.2			49	
128		0.6	0.75			50	
129	H-34L	0.6	3.0	Rectangular		-	Calibration Run
130	S-76	0.6	3.0	60% Taper	-	26	Repeat Run 73
131	S-76	0.55	3.0	60% Taper	Pusher	67	
132		0.6				66	
133		0.65				68	
134	-	0.6	3.0	-	Pusher	-	Tail Rotor Only Repeat Runs 86 and 106

TEST RUN LOG (Continued)

RUN #	MAIN ROTOR	MR M_t	Z/R	MR TIP	TAIL ROTOR MODE	TEST PLAN I.D. #	REMARKS
135	S-76	0.6	1.2	60% Taper	Pusher	69	
136		0.6	0.75			70	
137	-	0.6	3.0	-	Pusher	-	Tail Rotor only. Repeat Runs 86, 106 and 134.
138	S-76	0.55	3.0	60% Taper	Tractor	62	
139		0.6				61	
140		0.65				63	Missing piece on Main Rotor Blade.
141		0.65				63	Repeat Run 140
142		0.6	1.2			64	
143		0.6	0.75				
144	H-34L	0.6	0.3	Rectangular	-	-	Calibration Run
145	BLACK HAWK	0.6	3.0	Double Swept with Anhedral	-	11	Repeat Runs 44, 47 and 49.
146	BLACK HAWK	0.55	3.0	Double Swept with Anhedral	Tractor	52	
147		0.6				51	Suspect Tail Rotor Data
148	-	0.6	3.0	-	Tractor	-	Tail Rotor only. Repeat Run 110.
149		0.6					Repeat Runs 110 and 148.

TEST RUN LOG (Continued)

RUN #	MAIN ROTOR	MR M_t	Z/R	MR TIP	TAIL ROTOR MODE	TEST PLAN I.D. #	REMARKS
150	BLACK HAWK	0.55	3.0	Double Swept with Anhedral	Tractor	52	Repeat Run 146
151		0.6				51	Repeat Run 147
152		0.65				53	
153	-	0.55	3.0	-	Tractor	-	Tail Rotor only. Repeat Run 109.
154	BLACK HAWK	0.6	0.75	Double Swept with Anhedral	Tractor	55	
155		0.6	1.2			54	
156	-	0.65	3.0	-	Tractor	-	Tail Rotor only. Repeat Run 111.
157	BLACK HAWK	0.6	0.75	Double Swept with Anhedral	Pusher	60	
158		0.6	1.2			59	
159		0.55	3.0			57	
160		0.6				56	
161		0.65				58	
162	-	0.55	3.0	-	Pusher	-	Tail Rotor only. Repeat Run 85.
163		0.65					Repeat Run 87.
164		0.6					Repeat Runs 86, 106, 134 and 137.
165	H-34L	0.6	3.0	Rectangular	-	-	Calibration Run
166	S-76	0.6	3.0	Swept, Tapered	-	31	Repeat Run 17

TEST RUN LOG (Continued)

RUN #	MAIN ROTOR	MR M_t	Z/R	MR TIP	TAIL ROTOR MODE	TEST PLAN I.D. #	REMARKS
167	S-76	0.55	3.0	Swept, Tapered	Pusher		
168		0.6					
169		0.65					Tail Rotor problem.
170		0.65					Repeat Run 169.
171		0.6	1.2				
172		0.6	0.75				

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 1 DATE :8 SEPT 1982 OAT= 69 BAROMETER= 30.299 WET BULB TEMP= 59.5 DRY BULB TEMP= 69
WIND CONDITIONS :ZERO Z/R= 0
SUMMARY:S-70 MAIN WITH 20deg SWEPT TIPS/NO TAIL ROTOR PRESENT ***** POSSIBLE ROUNDING PROBLEM WITH TORQUE CELL *****

CONFIGURATION FILE : DATA: S70[1]WEXT/NoTail/*INACTIVE*
DATA FILE : TIP0811T.4

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.22396 in. = 4.68533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0819251

TAIL ROTOR NOT PRESENT

PROCESSING DATE :6 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001112 +.72850(Ct)^1.5 +145.888(Ct)^3

STANDARD DEVIATION = 1.34615E-4
MEAN ERROR = 2.69231E-4

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-.77	+.65	0.00000	0.000000	0.00000
2	0.000	+0.0	+1135.39	+286.83	0.00000	0.000000	0.00000
3	0.000	+0.0	+.63	+1.55	0.00000	0.000000	0.00000
4	0.000	+0.0	+.63	+.05	0.00000	0.000000	0.00000
5	.551	-.0	-6.29	+32.96	-.00123	.001378	.00634
6	.552	+2.0	+83.98	+37.34	.01058	.001558	.14043
7	.552	+4.1	+134.11	+52.98	.02619	.002208	.38753
8	.552	+6.1	+229.73	+81.37	.04487	.003392	.56573
9	.552	+7.1	+289.78	+103.03	.05667	.004301	.63337
10	.552	+7.1	+284.44	+102.01	.05563	.004258	.62212
11	.552	+8.1	+345.48	+127.43	.06744	.005309	.66602
12	.552	+9.1	+406.72	+156.92	.07944	.006542	.69102
13	.552	+10.0	+471.66	+189.30	.09229	.007899	.71620
14	.552	+10.8	+515.28	+215.80	.10054	.008986	.71619
15	.552	+10.2	+481.95	+195.66	.09432	.008173	.71561
16	.552	+9.9	+460.16	+184.47	.09006	.007707	.70804
17	.552	+9.1	+411.15	+159.26	.08045	.006652	.69267
18	.552	+8.6	+379.21	+144.20	.07420	.006006	.67669
19	.552	+8.4	+374.05	+139.91	.07313	.005838	.68391
20	.552	+8.2	+357.63	+133.18	.06998	.005559	.67239
21	.552	+7.7	+328.62	+120.98	.06426	.005049	.65141
22	.552	+7.5	+315.13	+114.13	.06162	.004764	.64836
23	.552	+7.2	+303.63	+108.94	.05927	.004539	.64185
24	.552	+6.9	+291.94	+101.29	.05702	.004219	.61765
25	.552	+6.5	+254.50	+90.94	.04973	.003793	.59039
26	.552	+5.5	+211.94	+75.60	.04135	.003148	.53921
27	.552	+4.5	+158.51	+61.17	.03094	.002549	.43120
28	.552	+3.6	+114.79	+50.25	.02240	.002093	.32344
29	.552	+2.5	+71.67	+41.46	.01399	.001727	.19347
30	.552	+.0	-5.98	+34.16	-.00117	.001422	.00565
31	0.000	+.0	-.63	+.65	0.00000	0.000000	0.00000
32	0.000	+.0	-.64	+.50	0.00000	0.000000	0.00000
33	0.000	+.0	+1134.88	+288.69	0.00000	0.000000	0.00000
34	0.000	+.0	-.13	+.35	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 4 DATE :5 OCT 1982; 14:30 OAT= 70 BAROMETER= 30.130 WET BULB TEMP= 63
DRY BULB TEMP= 70
WIND CONDITIONS :ZERO Z/R= 3
SUMMARY:8-70 MAIN WITH 20 deg SWEPT TIPS/FIRST 'BMTR' RUN AFTER 'RTR' OFF RAM RE
-ALIGNED TORQUE CELL BRACKET

CONFIGURATION FILE : DATA1 870[[[]WEKT/NoTail/+INACTIVE+
DATA FILE : TIP002:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.22396 in. = 4.68533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0815251

TAIL ROTOR NOT PRESENT

PROCESSING DATE :6 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001111 +.69296(Ct)^1.5 +200.626(Ct)^3

STANDARD DEVIATION = 1.59861E-15
MEAN ERROR = -3.33333E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+19.85	+1.59	0.00000	0.000000	0.00000
2	0.000	+0.0	+1135.14	+287.39	0.00000	0.000000	0.00000
3	0.000	+0.0	+.38	+.98	0.00000	0.000000	0.00000
4	0.000	+0.0	+.01	+.08	0.00000	0.000000	0.00000
5	.602	-.0	+.29	+39.14	.00005	.001383	.00005
6	.601	+2.1	+76.92	+45.43	.01276	.001609	.18094
7	.601	+4.1	+180.82	+67.75	.02983	.002396	.43415
8	.601	+6.0	+290.13	+101.94	.04813	.003609	.59060
9	.601	+7.9	+365.45	+129.31	.06056	.004574	.65790
10	.601	+8.1	+440.29	+162.00	.07313	.005743	.69529
11	.600	+9.1	+510.56	+198.13	.08487	.007029	.71015
12	.600	+9.5	+540.39	+216.21	.08990	.007676	.70888
13	.600	+9.3	+528.18	+208.14	.08783	.007388	.71131
14	.601	+8.8	+498.75	+187.24	.08136	.006628	.70717
15	.601	+8.5	+464.80	+177.33	.07706	.006275	.68832
16	.601	+8.2	+449.62	+168.18	.07462	.005955	.69114
17	.601	+7.7	+417.75	+154.53	.06925	.005467	.67294
18	.601	+7.5	+403.32	+147.36	.06683	.005212	.66930
19	.602	+7.2	+382.17	+137.87	.06323	.004868	.65934
20	.602	+7.0	+372.30	+132.85	.06163	.004694	.65813
21	.601	+6.5	+335.92	+118.12	.05574	.004184	.63514
22	.601	+5.5	+270.60	+94.45	.04493	.003347	.57451
23	.601	+4.6	+214.56	+77.09	.03555	.002726	.49643
24	.601	+3.6	+156.26	+62.18	.02592	.002201	.38269
25	.602	+2.5	+100.08	+50.69	.01656	.001791	.24037
26	.601	+1.5	+60.25	+43.71	.01000	.001549	.13043
27	.601	+.5	+31.52	+40.47	.00524	.001435	.05330
28	.601	-.1	+2.60	+40.35	.00043	.001429	.00126
29	0.000	-.1	-.01	+.08	0.00000	0.000000	0.00000
30	0.000	-.1	+18.67	+1.25	0.00000	0.000000	0.00000
31	0.000	-.1	+1135.12	+287.90	0.00000	0.000000	0.00000
32	0.000	-.1	+.61	+.50	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 3 DATE : 5 OCT 1982 OAT= 68.5 BAROMETER= 30.135 WET BULB TEMP= 63 DRY BULB TEMP= 68.5
WIND CONDITIONS :0 to 3 SOUTH Z/R= 3
SUMMARY:5-79 MAIN WITH 20deg SWEPT TIP/REPEAT OF 'TIP001'/NO TAIL ROTOR INSTALLED

CONFIGURATION FILE : DATA1 S79[III]WEXT/NoTail/*INACTIVE*
DATA FILE : TIP003:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.22396 in. = 4.68533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0815251

TAIL ROTOR NOT PRESENT

PROCESSING DATE :6 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001112 +.72449(Ct)^1.5 +139.844(Ct)^3

STANDARD DEVIATION = 5.09494E-15
MEAN ERROR = 1.04000E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+19.05	+2.12	0.00000	0.000000	0.00000
2	0.000	+0.0	+1135.26	+287.59	0.00000	0.000000	0.00000
3	0.000	+0.0	+.49	+.79	0.00000	0.000000	0.00000
4	0.000	+0.0	-.25	+.30	0.00000	0.000000	0.00000
5	.551	-.1	+4.86	+32.59	.00096	.001374	.00437
6	.551	+5.1	+196.54	+69.50	.03882	.002930	.52704
7	.552	+6.1	+248.07	+86.73	.04886	.003646	.59808
8	.551	+7.1	+305.51	+109.59	.06033	.004619	.64774
9	.551	+8.1	+366.33	+136.04	.07233	.005733	.68508
10	.551	+9.1	+425.57	+165.06	.08404	.006957	.70704
11	.550	+10.1	+481.05	+195.20	.09518	.008244	.71923
12	.550	+10.5	+511.46	+211.46	.10124	.008934	.72799
13	.550	+10.0	+481.86	+196.53	.09535	.008300	.71617
14	.551	+9.6	+454.15	+180.36	.08978	.007610	.71378
15	.550	+8.8	+412.84	+158.88	.08149	.006672	.70387
16	.551	+8.6	+394.66	+150.52	.07781	.006334	.69185
17	.551	+8.3	+384.67	+144.47	.07586	.006081	.69373
18	.551	+8.1	+375.68	+140.72	.07421	.005933	.68793
19	.551	+7.8	+353.29	+130.66	.06978	.005508	.67569
20	.551	+7.6	+345.52	+127.39	.06814	.005362	.66973
21	.550	+7.3	+325.82	+118.69	.06443	.005009	.65915
22	.551	+6.8	+297.11	+106.59	.05855	.004484	.63801
23	.551	+6.6	+279.72	+99.82	.05518	.004203	.62269
24	.550	+5.6	+226.76	+81.08	.04486	.003424	.56037
25	.550	+4.1	+154.86	+59.74	.03062	.002521	.42912
26	.550	+3.1	+109.95	+48.46	.02175	.002045	.31651
27	.551	+2.2	+78.76	+40.54	.01397	.001709	.19517
28	.551	+1.2	+41.92	+35.73	.00828	.001506	.10099
29	.551	-.1	+8.89	+33.71	.00175	.001419	.01045
30	0.000	-.1	+.25	+.30	0.00000	0.000000	0.00000
31	0.000	-.1	+18.79	+1.93	0.00000	0.000000	0.00000
32	0.000	-.1	+1135.50	+268.22	0.00000	0.000000	0.00000
33	0.000	-.1	+.74	+.09	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 4 DATE :9 OCT 1982 OAT= 66 BAROMETER= 30.14 WET BULB TEMP= 63.5 DRY B
ULB TEMP= 66
WIND CONDITIONS :0 to 3 SOUTH Z/R= 3
SUMMARY:3-76 MAIN WITH 20 deg SWEPT TIPS/NO TAIL ROTOR INSTALLED/JUST CLEANED BL
ADES

CONFIGURATION FILE : DATA1 $70[[[]wEKT/NoTail/*INACTIVE*
DATA FILE : TIP004:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.22396 in. = 4.68533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0819291

TAIL ROTOR NOT PRESENT

PROCESSING DATE :6 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001198 +.70287(Ct)^1.5 +216.025(Ct)^3

STANDARD DEVIATION = 3.57275E-15
MEAN ERROR = -8.42105E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+17.87	+1.71	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.83	+286.88	0.00000	0.000000	0.00000
3	0.000	+0.0	+.06	+1.50	0.00000	0.000000	0.00000
4	0.000	+0.0	-.56	+.08	0.00000	0.000000	0.00000
5	.651	+.0	-5.81	+46.15	-.00071	.001392	.00273
6	.652	+5.0	+261.03	+93.29	.03684	.002810	.58805
7	.652	+6.0	+335.17	+119.02	.04732	.003586	.57948
8	.651	+7.0	+420.33	+152.58	.05942	.004603	.63523
9	.650	+8.1	+514.52	+195.96	.07290	.005926	.67060
10	.652	+9.1	+603.08	+242.34	.08513	.007301	.68683
11	.651	+8.8	+588.69	+232.24	.08329	.007013	.69202
12	.651	+8.5	+558.73	+218.18	.07904	.006587	.68103
13	.651	+5.2	+279.44	+101.54	.03948	.003062	.51725
14	.651	+6.5	+378.08	+136.95	.05344	.004131	.60374
15	.651	+4.2	+208.40	+81.92	.02946	.002472	.41304
16	.651	+7.6	+467.51	+175.04	.06613	.005285	.64973
17	.652	+3.3	+150.74	+68.92	.02128	.002077	.30183
18	.651	+2.5	+99.95	+58.43	.01413	.001762	.19234
19	.651	+7.7	+481.06	+181.06	.06805	.005468	.65571
3	.651	+6.2	+357.54	+130.02	.05053	.003922	.58473
21	.651	+5.8	+320.31	+116.38	.04528	.003509	.55441
22	.651	+4.6	+233.47	+89.38	.03300	.002694	.44932
23	.652	+.3	+8.12	+49.02	.00115	.001477	.00531
24	0.000	+.3	+.56	+.08	0.00000	0.000000	0.00000
25	0.000	+.3	+18.36	+1.41	0.00000	0.000000	0.00000
26	0.000	+.3	+1135.83	+288.02	0.00000	0.000000	0.00000
27	0.000	+.3	+1.06	+.29	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 5 DATE :5 OCT 1982 OAT= 65 BAROMETER= 30.15 WET BULB TEMP= 62.5 DRY B
ULB TEMP= 65
WIND CONDITIONS :0-2 SOUTH Z/R= 1.2
SUMMARY:S-70 MAIN WITH 20 deg SWEPT TIPS/NO TAIL ROTOR

CONFIGURATION FILE : DATA1 S70[1,1]WEXT/NoTail/*INACTIVE=
DATA FILE : TIP005.I14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.22396 in. = 4.68533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0815251

TAIL ROTOR NOT PRESENT

PROCESSING DATE :6 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001113 +.68912(Ct)^1.5 +181.537(Ct)^3

STANDARD DEVIATION = 1.04149E-15
MEAN ERROR = 2.27273E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+17.61	+1.89	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.56	+288.36	0.00000	0.000000	0.00000
3	0.000	+0.0	-.21	+.02	0.00000	0.000000	0.00000
4	0.000	+0.0	-.70	+.38	0.00000	0.000000	0.00000
5	.602	+0.0	+4.34	+39.38	.00072	.001389	.00279
6	.602	+5.0	+237.88	+83.62	.03932	.002950	.53362
7	.602	+6.0	+302.30	+104.88	.04997	.003700	.60952
8	.602	+7.1	+378.46	+134.42	.06260	.004745	.66638
9	.601	+7.9	+440.97	+161.87	.07304	.005722	.69642
10	.601	+9.1	+524.06	+203.09	.08696	.007193	.71983
11	.601	+9.5	+557.19	+221.56	.09256	.007856	.72375
12	.601	+9.3	+540.46	+212.19	.08969	.007516	.72158
13	.601	+9.0	+523.73	+203.84	.08692	.007220	.71653
14	.601	+8.7	+503.96	+192.90	.08358	.006822	.71414
15	.601	+8.5	+491.86	+185.91	.08144	.006581	.71306
16	.602	+4.9	+237.50	+83.92	.03930	.002964	.53070
17	.602	+4.5	+210.27	+75.79	.03476	.002674	.48929
18	.602	+4.1	+185.16	+69.47	.03060	.002451	.44109
19	.602	+3.1	+128.44	+56.53	.02126	.001997	.31337
20	.602	+2.1	+79.06	+46.85	.01307	.001653	.18248
21	.601	+7.5	+414.92	+150.88	.06871	.005305	.68554
22	.601	+7.8	+435.28	+159.34	.07212	.005635	.69401
23	.601	+6.7	+351.76	+124.26	.05829	.004395	.64654
24	.602	+6.3	+326.89	+114.48	.05402	.004035	.62821
25	.602	+5.8	+291.19	+101.49	.04813	.003580	.59542
26	.602	+5.3	+261.06	+91.69	.04316	.003235	.55949
27	0.000	+.0	+18.54	+48.71	0.00000	0.000000	0.00000
28	0.000	+.0	+1150.63	+247.54	0.00000	0.000000	0.00000
29	0.000	+.0	+15.97	+48.87	0.00000	0.000000	0.00000
30	0.000	+.0	+.78	+.38	0.00000	0.000000	0.00000
31	0.000	+.0	-.73	+1.74	0.00000	0.000000	0.00000
32	0.000	+.0	+1136.33	+287.66	0.00000	0.000000	0.00000
33	0.000	+.0	+1.28	+.77	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 6 DATE :5 OCT 1982 OAT= 60 BAROMETER= 30.152 WET BULB TEMP= 59 DRY BU
LB TEMP= 60
WIND CONDITIONS :0-2 SOUTH Z/R= .75
SUMMARY:S-70 MAIN WITH 20deg SWEPT TIP/NO TAIL ROTOR INSTALLED

CONFIGURATION FILE : DATA1 S70(III)WEXT/NoTail/*INACTIVE*
DATA FILE : TIP006:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.22396 in. = 4.68533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0815251

TAIL ROTOR NOT PRESENT

PROCESSING DATE :6 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001128 +.66892(Ct)^1.5 +160.241(Ct)^3

STANDARD DEVIATION = 3.87469E-15
MEAN ERROR = 8.26087E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+16.23	+2.06	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.44	+286.58	0.00000	0.000000	0.00000
3	0.000	+0.0	-.31	+1.87	0.00000	0.000000	0.00000
4	0.000	+13.6	-.31	+.09	0.00000	0.000000	0.00000
5	.600	-.1	+1.74	+39.24	.00029	.001392	.00071
6	.600	+1.9	+73.41	+44.90	.01222	.001595	.17096
7	.600	+3.9	+180.41	+67.38	.03006	.002393	.43966
8	.599	+5.0	+245.25	+85.11	.04087	.003027	.55108
9	.599	+7.4	+422.01	+149.60	.07033	.005321	.70769
10	.600	+8.5	+499.21	+185.09	.08302	.006578	.73813
11	.600	+9.5	+577.38	+225.36	.09614	.008010	.75135
12	.600	+9.2	+556.70	+214.51	.09271	.007628	.74667
13	.600	+9.0	+538.77	+205.62	.08969	.007295	.74341
14	.600	+8.7	+518.65	+194.44	.08613	.006893	.74864
15	.601	+8.5	+503.82	+187.39	.08368	.006643	.73570
16	.601	+8.2	+485.40	+177.75	.08058	.006298	.73329
17	.600	+7.9	+464.24	+167.83	.07717	.005954	.72689
18	.600	+7.7	+446.62	+159.70	.07421	.005664	.72071
19	.600	+7.4	+427.93	+151.96	.07112	.005390	.71042
20	.599	+6.7	+378.67	+128.43	.06178	.004568	.67856
21	.600	+6.4	+351.24	+121.18	.05840	.004300	.66261
22	.600	+6.2	+334.09	+114.89	.05560	.004081	.64864
23	.600	+5.9	+311.56	+106.79	.05191	.003797	.62879
24	.600	+5.2	+263.91	+91.19	.04393	.003240	.57382
25	.599	+4.5	+218.79	+77.78	.03647	.002764	.50867
26	.599	+3.4	+154.63	+61.83	.02583	.002204	.38022
27	.600	-.1	+4.53	+40.03	.00076	.001424	.00294
28	0.000	-.1	+.31	+.09	0.00000	0.000000	0.00000
29	0.000	-.1	+16.85	+1.81	0.00000	0.000000	0.00000
30	0.000	-.1	+1139.69	+287.43	0.00000	0.000000	0.00000
31	0.000	-.1	+.69	+.88	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 7 DATE :10-7-82 OAT= 62.5 BAROMETER= 30.175 WET BULB TEMP= 59 DRY BUL
B TEMP= 62.5
WIND CONDITIONS :LIGHT/0 - 3 Kts Z/R= 3
SUMMARY:S-70 BLADES W/ 20-DEG SWEPT TIP/ EXTENDERS REMOVED FOR DATA AQUISITION C
HECKOUT.

CONFIGURATION FILE : DATA3 S70[III]woEXT/NoTail/INACTIVE
DATA FILE : TIP007.I14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 53.98804 in. = 4.49167 ft.
  CHORD : 3.6 in. = .3 ft.
  SOLIDITY : .0850401

TAIL ROTOR NOT PRESENT

PROCESSING DATE :6 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001215 +.70304(Ct)^1.5 +158.321(Ct)^3

STANDARD DEVIATION = 2.97780E-15
MEAN ERROR = -7.22222E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+14.86	+2.21	0.00000	0.000000	0.00000
2	0.000	+0.0	+1135.19	+286.32	0.00000	0.000000	0.00000
3	0.000	+0.0	+.42	+2.86	0.00000	0.000000	0.00000
4	0.000	+0.0	-.32	+.12	0.00000	0.000000	0.00000
5	.599	+.1	+6.54	+36.66	.00114	.001417	.00557
6	.600	+4.2	+170.49	+64.22	.02954	.002478	.42262
7	.600	+5.1	+219.41	+78.12	.03806	.003017	.50747
8	.600	+6.1	+260.08	+97.10	.04856	.003750	.58857
9	.600	+7.1	+347.26	+121.91	.06021	.004706	.64736
10	.600	+8.2	+418.09	+151.56	.07246	.005848	.68777
11	.600	+9.2	+487.80	+184.74	.08453	.007127	.71102
12	.599	+10.1	+554.83	+222.04	.09632	.008582	.71830
13	.599	+11.2	+628.46	+268.24	0.00000	0.000000	0.00000
14	.600	+11.7	+657.82	+292.65	0.00000	0.000000	0.00000
15	.600	+10.4	+579.96	+236.48	.10057	.009129	.72033
16	.599	+9.7	+521.53	+204.38	.09060	.007901	.71167
17	.600	+8.6	+447.20	+165.82	.07754	.006401	.69552
18	.600	+7.6	+382.44	+135.94	.06626	.005244	.67074
19	.600	+6.6	+317.10	+110.79	.05503	.004281	.62188
20	.600	+5.7	+254.27	+89.12	.04408	.003440	.55480
21	.601	+4.6	+195.42	+72.20	.03381	.002781	.46095
22	.600	+3.7	+141.98	+57.60	.02462	.002225	.35798
23	.599	+2.6	+92.89	+48.11	.01613	.001860	.22713
24	.600	-.2	-3.09	+37.47	-.00053	.001444	.00177
25	0.000	-.2	+.32	+.12	0.00000	0.000000	0.00000
26	0.000	-.2	+16.11	+2.21	0.00000	0.000000	0.00000
27	0.000	-.2	+1136.33	+287.53	0.00000	0.000000	0.00000
28	0.000	-.2	+.81	+.73	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 8 DATE :11 OCT 1982 12:50 OAT= 63 BAROMETER= 30.16 WET BULB TEMP= 58
DRY BULB TEMP= 62
WIND CONDITIONS :GUSTY 0-4 NORTH Z/R= 3
SUMMARY:S-70 MAIN WITH 20 deg SWEPT TIPS / EXTENDERS / RE-TRACKED ROTOR

CONFIGURATION FILE : DATA1 S70[[[]WEXT/NoTail<*INACTIVE*
DATA FILE : TIP008:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.22396 in. = 4.68533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY .0815251

TAIL ROTOR NOT PRESENT

PROCESSING DATE :6 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001054 +.7409(Ct)^1.5 +133.346(Ct)^3

STANDARD DEVIATION = 3.91918E-15
MEAN ERROR = 8.00000E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+15.75	+2.51	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.84	+288.04	0.00000	0.000000	0.00000
3	0.000	+0.0	+.87	+.33	0.00000	0.000000	0.00000
4	0.000	+0.0	-.86	+0.00	0.00000	0.000000	0.00000
5	.601	+.0	-7.27	+37.69	-.00120	.001330	.00632
6	.601	+5.3	+240.64	+83.79	.03979	.002957	.54191
7	.602	+5.9	+282.31	+98.15	.04661	.003459	.58743
8	.601	+7.0	+357.90	+127.08	.05924	.004490	.64846
9	.601	+8.0	+434.72	+161.20	.07190	.005690	.68402
10	.602	+9.0	+503.29	+192.52	.08316	.006789	.71311
11	.602	+9.5	+529.54	+211.14	.08749	.007446	.70176
12	.601	+9.5	+550.25	+216.79	.09103	.007655	.72439
13	.601	+9.3	+530.11	+206.55	.08762	.007286	.71866
14	.602	+2.6	+91.67	+47.58	.01513	.001676	.22423
15	.602	+3.5	+142.04	+58.55	.02346	.002064	.35147
16	.602	+5.3	+522.26	+205.12	.08618	.007225	.70706
17	.602	+5.	+503.62	+196.96	.08316	.006942	.69750
18	.601	+8.8	+476.85	+183.75	.07886	.006486	.68935
19	.601	+8.5	+460.21	+176.11	.07607	.006213	.68178
20	.602	+8.3	+444.46	+167.46	.07344	.005905	.68037
21	.602	+8.1	+434.20	+161.63	.07164	.005691	.68030
22	.602	+7.7	+405.50	+149.75	.06697	.005278	.66288
23	.602	+7.5	+396.27	+144.25	.06548	.005087	.66500
24	.602	+7.3	+379.43	+137.96	.06261	.004858	.65097
25	.602	+7.0	+362.99	+130.37	.05993	.004594	.64476
26	.602	+6.6	+334.11	+117.53	.05521	.004145	.63189
27	.602	+4.8	+224.85	+78.74	.03697	.002773	.51753
28	.602	+1.0	+43.21	+40.81	.00713	.001438	.08460
29	.602	-.2	-7.57	+38.57	-.00125	.001358	.00656
30	0.000	+0.0	+.06	+0.00	0.00000	0.000000	0.00000
31	0.000	-.2	+16.24	+2.27	0.00000	0.000000	0.00000
32	0.000	-.2	+1135.45	+288.28	0.00000	0.000000	0.00000
33	0.000	-.2	+.06	+0.00	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 9 DATE :11 OCT 1982 OAT= 61 BAROMETER= 30.118 WET BULB TEMP= 49 DRY B
ULB TEMP= 60.5
WIND CONDITIONS :GUSTY 0-5 NORTH Z/R= 3
SUMMARY:FIRST OF MACH SWEEP / S-70 WITH 20 deg SWEPT TIPS / EXTENDERS

CONFIGURATION FILE : DATA: S70[[[]wEXT/NoTail/*INACTIVE*
DATA FILE : TIP009:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 56.22396 in. = 4.68533 ft.
  CHORD : 3.6 in. = .3 ft.
  SOLIDITY : .0815291

TAIL ROTOR NOT PRESENT

PROCESSING DATE :6 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001038 +.70385(Ct)^1.5 +166.405(Ct)^3

STANDARD DEVIATION = 1.33978E-15
MEAN ERROR = -3.15289E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+17.45	+3.01	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.52	+297.75	0.00000	0.000000	0.00000
3	0.000	+0.0	-.24	+.62	0.00000	0.000000	0.00000
4	0.000	+0.0	-.37	+.32	0.00000	0.000000	0.00000
5	.282	-.2	+5.61	+8.42	.00421	.001350	.04092
6	.282	+1.9	+19.42	+9.99	.01458	.001601	.22208
7	.282	+4.0	+38.61	+14.07	.02907	.002261	.44255
8	.282	+5.9	+63.98	+21.96	.04825	.003536	.60538
9	.282	+8.1	+94.80	+33.81	.07168	.005451	.70965
10	.282	+9.9	+119.68	+47.27	.08987	.007575	.71802
11	.283	+11.9	+147.57	+63.29	.11046	.010111	.73306
12	.283	+11.4	+141.71	+59.57	.10586	.009497	.73217
13	.283	+11.1	+138.11	+57.15	.10300	.009097	.73365
14	.284	+10.4	+130.50	+52.37	.09682	.008293	.73338
15	.283	+10.7	+131.10	+53.64	.09777	.008539	.72287
16	.283	+9.4	+112.85	+42.88	.08419	.006828	.72232
17	.283	+8.4	+98.73	+36.35	.07396	.005814	.69873
18	.282	+8.9	+104.91	+38.77	.07869	.006207	.71804
19	.282	+7.4	+84.26	+30.03	.06327	.004813	.66753
20	.282	+6.4	+72.57	+24.68	.05462	.003965	.65002
21	.282	+5.4	+58.17	+19.97	.04367	.003199	.57593
22	.282	+4.4	+46.35	+16.34	.03489	.002625	.50122
23	.283	-.0	+6.35	+8.63	.00476	.001380	.04804
24	0.000	-.0	+.37	+.32	0.00000	0.000000	0.00000
25	0.000	-.0	+17.45	+2.86	0.00000	0.000000	0.00000
26	0.000	-.0	+1135.13	+287.84	0.00000	0.000000	0.00000
27	0.000	-.0	+.50	+.41	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 10 DATE :11 OCT 1982 OAT= 60 BAROMETER= 30.112 WET BULB TEMP= 50 DRY BULB TEMP= 59
WIND CONDITIONS :SOUTH / GUSTY / 0-4 Z/R= 3
SUMMARY:SECOND MACH SWEEP / 8-78 MAIN WITH 20 DEG SWEPT TIPS / EXTENDER?

CONFIGURATION FILE : DATA1 $78[[[]wEXT/NoTa:1/*INACTIVE*
DATA FILE : TIP010:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 56.22396 in. = 4.68533 ft.
  CHORD : 3.6 in. = .3 ft.
  SOLIDITY : .0815291

TAIL ROTOR NOT PRESENT

PROCESSING DATE :6 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001042 +.70042(Ct)^1.5 +180.085(Ct)^3

STANDARD DEVIATION = 4.68923E-15
MEAN ERROR = 1.10526E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+17.39	+2.87	0.00000	0.000000	0.00000
2	0.000	+0.0	+1135.07	+288.19	0.00000	0.000000	0.00000
3	0.000	+0.0	+.31	+.18	0.00000	0.000000	0.00000
4	0.000	+0.0	-.30	+.15	0.00000	0.000000	0.00000
5	.400	-.1	+9.34	+16.91	.00349	.001340	.03104
6	.400	+1.0	+21.78	+17.92	.00812	.001432	.10317
7	.400	+1.9	+37.78	+20.37	.01416	.001630	.20879
8	.400	+2.9	+57.10	+23.67	.02133	.001987	.33330
9	.400	+3.9	+78.52	+28.44	.02933	.002269	.44725
10	.401	+4.9	+103.94	+35.55	.03876	.002829	.54450
11	.400	+6.1	+134.11	+45.79	.05012	.003653	.62017
12	.400	+7.0	+159.04	+55.41	.05941	.004418	.66181
13	.400	+7.9	+183.10	+65.87	.06849	.005258	.68816
14	.400	+9.0	+213.63	+80.10	.00006	.006407	.71383
15	.400	+10.0	+236.47	+94.25	.08829	.007510	.70519
16	.400	+10.9	+266.51	+110.75	.09954	.008829	.71018
17	.400	+11.4	+285.52	+120.70	.10668	.009643	.73156
18	.400	+10.5	+260.61	+105.25	.09742	.008398	.73107
19	.400	+9.4	+230.21	+88.60	.08597	.007061	.72067
20	.401	+8.4	+203.32	+74.90	.07583	.005962	.70706
21	.400	+7.5	+174.63	+62.63	.06540	.004958	.68108
22	.401	+6.4	+145.13	+49.97	.05399	.003968	.63843
23	.400	-.1	+12.42	+17.53	.00464	.001398	.04567
24	0.000	-.1	+.30	+.15	0.00000	0.000000	0.00000
25	0.000	-.1	+18.00	+2.87	0.00000	0.000000	0.00000
26	0.000	-.1	+1136.87	+288.73	0.00000	0.000000	0.00000
27	0.000	-.1	+.80	+.51	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 11 DATE :11 OCT 1982 OAT= 60 BAROMETER= 30.115 WET BULB TEMP= 50 DP/
BULB TEMP= 59
WIND CONDITIONS :GUSTY 0-4 SOUTH Z/R= 3
SUMMARY:THIRD MACH SWEEP / S-79 MAIN WITH 20 DEG SWEPT TIPS / EXTENDERS

CONFIGURATION FILE : DATA1 $:III)WEXT/NoT&11/*INACTIVE-
MAIN FILE :-TIP011:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 56.22396 in. = 4.68533 ft.
  CHORD : 3.6 in. = .3 ft.
  SOLIDITY : .0815251

TAIL ROTOR NOT PRESENT

PROCESSING DATE :6 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001053 +.72187(Ct)^1.5 +154.152(Ct)^3

STANDARD DEVIATION = 2.51968E-15
MEAN ERROR = -6.11111E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+17.72	+2.72	0.00000	0.000000	0.00000
2	0.000	+0.0	+1135.14	+288.92	0.00000	0.000000	0.00000
3	0.000	+0.0	+.38	+.54	0.00000	0.000000	0.00000
4	0.000	+0.0	-.62	+0.00	0.00000	0.000000	0.00000
5	.500	-.0	+9.17	+26.03	.00219	.001328	.01560
6	.501	+1.0	+30.35	+27.52	.00724	.001402	.08879
7	.500	+2.1	+52.87	+30.81	.01245	.001572	.17834
8	.501	+3.1	+88.27	+37.62	.02104	.001913	.32198
9	.500	+4.0	+123.42	+45.96	.02950	.002345	.43629
10	.501	+5.0	+162.16	+56.66	.03871	.002887	.53263
11	.501	+6.0	+202.34	+70.24	.04829	.003578	.59883
12	.501	+7.1	+250.13	+88.11	.05975	.004492	.65642
13	.500	+8.1	+290.87	+107.04	.06953	.005461	.67780
14	.500	+9.1	+340.98	+129.20	.08149	.006590	.71264
15	.501	+10.1	+391.48	+156.39	.09351	.007975	.72397
16	.501	+11.1	+433.02	+182.54	.10346	.009308	.72176
17	.501	+10.5	+409.01	+167.24	.09769	.008526	.72308
18	.500	+9.5	+360.48	+140.24	.08615	.007153	.71368
19	.500	+8.6	+311.58	+118.11	.07445	.006024	.68093
20	.500	+7.6	+272.08	+98.51	.06503	.005026	.66627
21	.501	+6.5	+228.10	+79.16	.05445	.004033	.63682
22	.500	-.0	+15.38	+27.36	.00368	.001396	.03225
23	0.000	-.0	+.62	+0.00	0.00000	0.000000	0.00000
24	0.000	-.0	+17.72	+2.57	0.00000	0.000000	0.00000
25	0.000	-.0	+1134.99	+288.52	0.00000	0.000000	0.00000
26	0.000	-.0	+.86	+.24	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 12 DATE :12 OCT 1982 OAT= 49 BAROMETER= 30.136 WET BULB TEMP= 47 DRY BULB TEMP= 49
WIND CONDITIONS :LIGHT/0-2/VARIED Z/R= 3
SUMMARY:H-34 CALIBRATION BLADES-BASELINE RUN-FUSELAGE PRESENT

CONFIGURATION FILE : DATA8 -, H34[1,1]/NoTail/**INACTIVE**
DATA FILE : TIP012:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 54.24996 in. = 4.52083 ft.
CHORD : 4.250004 in. = .354167 ft.
SOLIDITY : .099747

TAIL ROTOR NOT PRESENT

PROCESSING DATE :6 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001271 +.95018(Ct)^1.5 +70.970(Ct)^3

STANDARD DEVIATION = 4.465944E-16
MEAN ERROR = 1.052638E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+13.27	+2.42	0.00000	0.000000	0.00000
2	0.000	+0.0	+1135.12	+286.86	0.00000	0.000000	0.00000
3	0.000	+0.0	+.36	+1.51	0.00000	0.000000	0.00000
4	0.000	+0.0	-.63	+.51	0.00000	0.000000	0.00000
5	.599	-.0	+.23	+38.54	.00003	.001247	.00003
6	.600	+7.1	+337.42	+132.56	.04924	.004279	.57025
7	.599	+8.1	+401.91	+162.10	.05879	.005245	.60694
8	.599	+9.1	+465.89	+194.44	.06813	.006290	.63143
9	.599	+10.1	+539.68	+233.41	.07894	.007552	.65585
10	.600	+1.1	+21.49	+41.23	.00314	.001331	.02946
11	.600	+2.0	+53.48	+45.33	.00780	.001461	.10527
12	.600	+3.1	+99.96	+54.43	.01458	.001757	.22384
13	.600	+4.1	+157.19	+68.38	.02297	.002210	.35172
14	.599	+9.6	+500.28	+212.96	.07316	.006889	.64145
15	.599	+8.6	+437.25	+179.66	.06393	.005811	.62126
16	.600	+7.5	+371.23	+147.07	.05423	.004753	.59347
17	.600	+6.5	+303.93	+118.69	.04439	.003834	.54471
18	.600	+5.6	+250.93	+98.37	.03667	.003180	.49317
19	.600	+6.0	+271.42	+106.90	.03966	.003455	.51050
20	.599	+5.0	+212.80	+86.19	.03113	.002789	.43979
21	.600	+3.6	+134.61	+62.76	.01966	.002028	.30365
22	.599	+9.8	+517.98	+221.89	.07588	.007182	.64886
23	.599	+.0	+2.27	+39.63	.00033	.001282	.00105
24	0.000	+.0	+.63	+.51	0.00000	0.000000	0.00000
25	0.000	+.0	+14.52	+2.30	0.00000	0.000000	0.00000
26	0.000	+.0	+1136.38	+288.34	0.00000	0.000000	0.00000
27	0.000	+.0	+1.25	+0.00	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 13 DATE :12 OCT 1982 OAT= 59 BAROMETER= 30.142 WET BULB TEMP= 46 DRY
BULB TEMP= 52
WIND CONDITIONS :LIGHT / 0-2 / VARIED Z/P= 0
SUMMARY:M-34 LARGE CHORD-MACH SWEEP

CONFIGURATION FILE : DATA5 -. M34[1,1]/NoTail/**INACTIVE**
DATA FILE : TIP013:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :-
  RADIUS : 54.24996 in. = 4.52083 ft.
  CHORD : 4.250004 in. = .354167 ft.
  SOLIDITY : .099747

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001189 +.82783(Ct)^1.5 +183.768(Ct)^3

STANDARD DEVIATION = 2.232975E-15
MEAN ERROR = 5.26316E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+13.27	+2.57	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.75	+286.43	0.00000	0.000000	0.00000
3	0.000	+0.0	-.01	+.06	0.00000	0.000000	0.00000
4	0.000	+0.0	+.00	+.30	0.00000	0.000000	0.00000
5	.300	-.0	+.63	+0.65	.00037	.001120	.00142
6	.300	+1.0	+5.67	+0.86	.00332	.001147	.03718
7	.299	+2.0	+14.55	+10.04	.00852	.001301	.13511
8	.300	+3.0	+24.50	+11.97	.01434	.001550	.24730
9	.300	+4.1	+38.55	+15.42	.02256	.001996	.37905
10	.299	+5.0	+50.53	+19.05	.02966	.002473	.46121
11	.300	+6.0	+66.02	+24.43	.03849	.003151	.53520
12	.300	+7.0	+80.32	+30.39	.04701	.003934	.57852
13	.300	+8.0	+94.74	+36.83	.05535	.004760	.61106
14	.299	+9.1	+112.91	+45.11	.06632	.005861	.65075
15	.300	+10.0	+128.28	+53.67	.07493	.006935	.66053
16	.300	+9.5	+128.05	+48.92	.06998	.006308	.65537
17	.300	+9.1	+113.27	+45.23	.06601	.005831	.64953
18	.300	+8.5	+106.07	+41.12	.06184	.005303	.64755
19	.300	+7.5	+89.74	+34.05	.05231	.004390	.60865
20	.300	+6.5	+74.66	+27.61	.04350	.003558	.56947
21	.300	+5.5	+59.96	+21.89	.03496	.002823	.51705
22	.300	+4.5	+44.98	+17.57	.02622	.002265	.41860
23	.300	-.0	+.74	+0.92	.00043	.001152	.00176
24	0.000	-.0	-.00	+.30	0.00000	0.000000	0.00000
25	0.000	-.0	+14.03	+2.57	0.00000	0.000000	0.00000
26	0.000	-.0	+1135.13	+288.52	0.00000	0.000000	0.00000
27	0.000	-.0	+.62	+.24	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 14 DATE :12 OCT 1982 OAT= 54 BAROMETER= 30.139 WET BULB TEMP= 46 DRY BULB TEMP= 53
WIND CONDITIONS :ZERO Y/R= 0
SUMMARY:H-34 LARGE CHORD-MACH SWEEP

CONFIGURATION FILE : DATA5 H34CIII/NoTail/**INACTIVE**
DATA FILE : TIP014:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 54.24996 in. = 4.52083 ft.
CHORD : 4.250004 in. = .354167 ft.
SOLIDITY : .099747

TAIL ROTOR NOT PRESENT

PROCESSING DATE :6 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001142 +.83505(Ct)^1.5 +108.316(Ct)^3

STANDARD DEVIATION = 4.46594E-16
MEAN ERROR = 1.05263E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+13.92	+2.18	0.00000	0.000000	0.00000
2	0.000	+0.0	+1135.37	+287.83	0.00000	0.000000	0.00000
3	0.000	+0.0	+.61	+.54	0.00000	0.000000	0.00000
4	0.000	+0.0	+.00	+.06	0.00000	0.000000	0.00000
5	.401	+.0	+.99	+15.96	.00032	.001154	.00113
6	.401	+1.1	+9.88	+16.21	.00323	.001171	.03498
7	.401	+2.1	+24.45	+19.23	.00800	.001320	.12112
8	.401	+3.0	+44.81	+21.98	.01467	.001592	.24928
9	.401	+4.0	+68.67	+28.15	.02247	.002038	.36925
10	.400	+5.1	+94.31	+36.13	.03093	.002621	.46348
11	.401	+6.0	+120.65	+45.11	.03949	.003266	.53663
12	.400	+6.0	+119.80	+44.81	.03929	.003251	.53508
13	.400	+7.1	+146.84	+55.87	.04809	.004053	.58109
14	.400	+8.1	+175.69	+69.05	.05761	.005009	.61656
15	.400	+9.0	+199.43	+81.03	.06541	.005879	.63552
16	.400	+10.0	+227.99	+96.57	.07477	.007005	.65176
17	.401	+9.6	+218.00	+90.31	.07137	.006548	.65110
18	.401	+8.5	+189.35	+75.43	.06199	.005463	.63100
19	.401	+7.5	+162.70	+62.37	.05318	.004518	.60732
20	.401	+6.5	+133.79	+50.52	.04372	.003652	.55906
21	.400	+5.5	+107.51	+40.68	.03520	.002961	.49822
22	.400	+4.6	+82.08	+32.59	.02692	.002365	.41720
23	.401	+.0	+1.12	+16.24	.00037	.001176	.00133
24	0.000	+.0	-.00	+.06	0.00000	0.000000	0.00000
25	0.000	+.0	-14.53	+2.03	0.00000	0.000000	0.00000
26	0.000	+.0	+1135.38	+287.89	0.00000	0.000000	0.00000
27	0.000	+.0	+.62	+.36	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 15 DATE :12 OCT 1982 OAT= 59 BAROMETER= 30.192 WET BULB TEMP= 48 DRY BULB TEMP= 52
WIND CONDITIONS :ZERO Z/R= 0
SUMMARY:H-34 LARGE CHORD-MACH SWEEP

CONFIGURATION FILE : DATA5 H34[1]/NoTail/**INACTIVE**
DATA FILE : TIP015:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 54.24998 in. = 4.52083 ft.
CHORD : 4.250004 in. = .354167 ft.
SOLIDITY :.099747

TAIL ROTOR NOT PRESENT

PROCESSING DATE :6 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001158 +.95811(Ct)^1.5 +71.444(Ct)^3

STANDARD DEVIATION = 6.69891E-16
MEAN ERROR = 1.57895E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+13.92	+2.22	0.00000	0.000000	0.00000
2	0.000	+0.0	+1135.27	+288.14	0.00000	0.000000	0.00000
3	0.000	+0.0	+.58	+.23	0.00000	0.000000	0.00000
4	0.000	+0.0	+.91	+.38	0.00000	0.000000	0.00000
5	.550	+0.0	+.37	+30.17	.00006	.001159	.00010
6	.551	+1.0	+15.02	+30.98	.00260	.001181	.02501
7	.551	+2.0	+12.08	+34.22	.00727	.001311	.10564
8	.551	+3.0	+82.79	+41.97	.01433	.001606	.23827
9	.551	+4.0	+129.58	+53.52	.02245	.002052	.36628
10	.551	+5.0	+177.04	+68.43	.03065	.002620	.45727
11	.550	+6.1	+231.19	+87.73	.04000	.003365	.53267
12	.551	+7.1	+281.53	+108.75	.04879	.004169	.57731
13	.550	+8.1	+339.11	+133.64	.05880	.005126	.62123
14	.552	+9.1	+392.54	+161.98	.06769	.006175	.63687
15	.550	+10.1	+449.49	+191.87	.07794	.007359	.66033
16	.550	+9.5	+413.07	+172.63	.07162	.006621	.64650
17	.550	+8.5	+360.08	+148.41	.06244	.005577	.62473
18	.551	+7.5	+309.60	+120.85	.05366	.004633	.59914
19	.551	+6.5	+255.22	+97.53	.04416	.003735	.55533
20	.551	+5.5	+206.10	+78.44	.03566	.003004	.50107
21	.551	+4.5	+158.86	+63.14	.02749	.002416	.42114
22	.551	+3.5	+110.51	+48.86	.01915	.001873	.31599
23	.551	-.0	+1.10	+31.11	.00019	.001191	.00049
24	0.000	-.0	-.01	+.38	0.00000	0.000000	0.00000
25	0.000	-.0	+14.54	+2.67	0.00000	0.000000	0.00000
26	0.000	-.0	+1135.61	+287.69	0.00000	0.000000	0.00000
27	0.000	-.0	-.02	+.68	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 16 DATE :12 OCT 1982 OAT= 60 BAROMETER= 30.05 WET BULB TEMP= 55 DRY BULB TEMP= 60
WIND CONDITIONS :LIGHT/ 0-2 kts Z/R= 3
SUMMARY:H-34 LARGE CHORD/MACH SWEEP

CONFIGURATION FILE : DATA5 H34[III]/NoTail/**INACTIVE**
DATA FILE : TIP016:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 54.24996 in = 4.52083 ft.
  CHORD : 4.250004 in. = .354167 ft.
  SOLIDITY : .099747

TAIL ROTOR NOT PRESENT

PROCESSING DATE :6 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001184 +.96503(Ct)^1.5 +55.687(Ct)^3

STANDARD DEVIATION = 1.42752E-15
MEAN ERROR = 3.043486E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+15.34	+2.04	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.88	+287.39	0.00000	0.000000	0.00000
3	0.000	+0.0	+.13	+.98	0.00000	0.000000	0.00000
4	0.000	+0.0	-.12	+.08	0.00000	0.000000	0.00000
5	.651	+.0	-.40	+42.81	-.00005	.001177	.00007
6	.651	+1.1	+20.44	+44.20	.00254	.001215	.02354
7	.651	+2.0	+58.63	+49.10	.00730	.001352	.10299
8	.651	+3.0	+120.05	+60.71	.01493	.001670	.24399
9	.652	+4.1	+190.08	+79.09	.02360	.002172	.37273
10	.651	+5.0	+248.71	+96.78	.03096	.002665	.45653
11	.650	+6.0	+315.86	+121.34	.03936	.003345	.52142
12	.650	+7.0	+392.98	+152.73	.04896	.004209	.57483
13	.650	+7.5	+429.73	+168.67	.05355	.004649	.59524
14	.650	+8.0	+468.75	+187.29	.05854	.005174	.61134
15	.650	+7.9	+450.66	+178.74	.05616	.004927	.60327
16	.651	+7.5	+437.04	+171.66	.05448	.004727	.59955
17	.651	+7.2	+413.51	+161.74	.05149	.004455	.58572
18	.651	+6.8	+373.94	+145.50	.04654	.004006	.55976
19	.651	+6.5	+359.76	+138.67	.04472	.003813	.55395
20	.651	+6.3	+343.05	+132.38	.04266	.003641	.54040
21	.650	+6.0	+324.08	+125.03	.04042	.003450	.52615
22	.651	+5.7	+303.97	+117.58	.03782	.003234	.50706
23	.651	+5.5	+280.59	+109.39	.03495	.003014	.48411
24	.651	+5.2	+269.52	+105.13	.03351	.002891	.47381
25	.651	+5.0	+256.93	+100.81	.03198	.002776	.46020
26	.651	+4.5	+222.44	+89.59	.02763	.002461	.41668
27	.651	+.2	+3.02	+44.56	.00038	.001227	.00133
28	0.000	+.2	+.12	+.08	0.00000	0.000000	0.00000
29	0.000	+.2	+15.34	+1.89	0.00000	0.000000	0.00000
30	0.000	+.2	+1135.50	+288.02	0.00000	0.000000	0.00000
31	0.000	+.2	+.49	+.35	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 17 DATE :15 OCT 1982 OAT= 53.5 BAROMETER= 29.595 WET BULB TEMP= 49 DR
Y BULB TEMP= 53.5
WIND CONDITIONS :LIGHT, VARIED 0 TO 2 kts Z/R= 3
SUMMARY:S-76 MAIN W. 20 Deg SWEEP & 60% TAPER. EXTENDERS PRESENT - CHANGED NEFF
CARD ON TORQUE LINE

CONFIGURATION FILE : DATA2 S76[[[]WEXT/NoTail/*INACTIVE*
DATA FILE : TIP817:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.099996 in. = .258333 ft.
SOLIDITY : .0784325

TAIL ROTOR NOT PRESENT

PROCESSING DATE :6 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000959 +.69528(Ct)^1.5 +266.467(Ct)^3

STANDARD DEVIATION = 2.17811E-15
MEAN ERROR = -4.54167E-16

Pt.	Tip M#	Theta - deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-1.61	+1.80	0.00000	0.000000	0.00000
2	0.000	+0.0	+1133.71	+288.13	0.00000	0.000000	0.00000
3	0.000	+0.0	-1.05	+.24	0.00000	0.000000	0.00000
4	0.000	+0.0	-1.55	+.30	0.00000	0.000000	0.00000
5	.599	+.0	-6.17	+32.44	-.00122	.001375	.00583
6	.600	+1.7	+35.85	+34.18	.00709	.001447	.07738
7	.599	+3.7	+114.22	+47.47	.02262	.002013	.31712
8	.599	+5.7	+207.77	+70.76	.04123	.003006	.52249
9	.600	+6.7	+257.75	+86.39	.05095	.003657	.59020
10	.599	+7.8	+309.37	+105.84	.06131	.004491	.63430
11	.599	+8.7	+365.22	+127.71	.07240	.005421	.67433
12	.599	+10.0	+429.14	+159.94	.08513	.006794	.68607
13	.599	+10.3	+452.21	+170.32	.08969	.007233	.69682
14	.600	+10.8	+474.42	+183.80	.09365	.007769	.69225
15	.600	+10.5	+460.37	+175.42	.09103	.007428	.69390
16	.600	+10.2	+445.50	+167.74	.08796	.007092	.69029
17	.600	+9.9	+428.53	+158.17	.08465	.006690	.69082
18	.599	+9.5	+406.50	+147.61	.08064	.006270	.68535
19	.598	+9.2	+390.48	+139.62	.07750	.005934	.68229
20	.599	+8.9	+372.21	+131.94	.07379	.005601	.67156
21	.599	+8.5	+350.13	+122.87	.06938	.005179	.66210
22	.599	+8.2	+341.57	+118.17	.06770	.005015	.65911
23	.599	+8.0	+328.10	+112.38	.06503	.004769	.65249
24	.599	+7.2	+286.40	+96.77	.05683	.004112	.61829
25	.599	+6.2	+239.11	+80.60	.04733	.003417	.56564
26	.599	+5.2	+187.09	+64.94	.03710	.002757	.48634
27	.600	+4.3	+149.62	+55.36	.02958	.002344	.40731
28	.599	+.6	+13.17	+32.50	.00261	.001379	.01815
29	0.000	+.6	+1.55	+.30	0.00000	0.000000	0.00000
30	0.000	+.6	+.76	+1.80	0.00000	0.000000	0.00000
31	0.000	+.6	+1136.19	+287.47	0.00000	0.000000	0.00000
32	0.000	+.6	+1.92	+.84	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 18 DATE :15 OCT 1982 OAT= 56 BAROMETER= 29.56 WET BULB TEMP= 50.2 DRY BULB TEMP= 56
WIND CONDITIONS :LIGHT VARIED 0 TO 2 kts Z/R= 3
SUMMARY:S-76 MAIN W/ 20 Deg SWEEP & 80% TAPER EXTENDERS PRESENT / CHANGED NEFF CARD ON TORQUE LINE

CONFIGURATION FILE : DATA2 S76[[[]WEXT/HoTail/+INACTIVE+
DATA FILE : TIP818:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.099996 in. = .258333 ft.
SOLIDITY : .0784325

TAIL ROTOR NOT PRESENT

PROCESSING DATE :6 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000951 +.69100(Ct)^1.5 +237.326(Ct)^3

STANDARD DEVIATION = 4.85356E-15
MEAN ERROR = 1.03478E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-.79	+2.33	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.89	+287.97	0.00000	0.000000	0.00000
3	0.000	+0.0	+.13	+.41	0.00000	0.000000	0.00000
4	0.000	+0.0	-.12	+.23	0.00000	0.000000	0.00000
5	.550	+.0	+8.28	+26.84	.00194	.001350	.01192
6	.550	+2.1	+66.31	+33.72	.01559	.001698	.21520
7	.550	+4.0	+137.71	+48.87	.03238	.002461	.44438
8	.549	+6.1	+223.59	+73.93	.05267	.003730	.60817
9	.549	+7.0	+261.54	+87.35	.06158	.004404	.65118
10	.550	+8.1	+308.62	+106.79	.07261	.005380	.68242
11	.550	+9.0	+351.65	+126.75	.08279	.006390	.69957
12	.550	+10.2	+402.69	+152.41	.09471	.007676	.71260
13	.550	+11.0	+437.76	+173.45	.10296	.008735	.70973
14	.550	+11.5	+463.37	+189.50	0.00000	0.000000	0.00000
15	.549	+11.3	+452.09	+182.69	0.00000	0.000000	0.00000
16	.550	+10.8	+433.52	+170.48	.10192	.008582	.71149
17	.550	+10.5	+420.02	+163.21	.09869	.008212	.70852
18	.550	+10.3	+415.95	+158.74	.09759	.007975	.71739
19	.550	+10.0	+402.43	+152.86	.09446	.007685	.70919
20	.550	+9.8	+394.71	+146.95	.09270	.007390	.71669
21	.550	+9.5	+379.12	+139.35	.08909	.007012	.71162
22	.550	+9.2	+369.30	+134.55	.08682	.006774	.70874
23	.550	+9.0	+356.26	+129.54	.08367	.006514	.69716
24	.550	+8.7	+341.68	+122.88	.08022	.006178	.69021
25	.550	+8.3	+325.19	+114.06	.07639	.005737	.69061
26	.550	+7.5	+287.37	+98.21	.06754	.004943	.66644
27	.550	+6.5	+242.03	+81.46	.05682	.004095	.62062
28	.550	+9.5	+377.22	+139.83	.08860	.007033	.70370
29	.551	-.0	+12.34	+27.80	.00289	.001396	.02092
30	0.000	-.0	+.12	+.23	0.00000	0.000000	0.00000
31	0.000	-.0	+.46	+2.03	0.00000	0.000000	0.00000
32	0.000	-.0	+1134.89	+287.97	0.00000	0.000000	0.00000
33	0.000	-.0	+.50	+.32	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 19 DATE :15 OCT 1982 OAT= 57.5 BAROMETER= 29.558 WET BULB TEMP= 51.5
DRY BULB TEMP= 57.5
WIND CONDITIONS :LIGHT VARIED 0 TO 2 kts Z/R= 3
SUMMARY:S-76 MAIN W/ 20 Deg SWEEP & 60% TAPER. EXTENDERS PRESENT

CONFIGURATION FILE : DATA2 S76IIIJWEXT/NoTail/*INACTIVE-
DATA FILE : TIP019:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.099996 in. = .258333 ft.
SOLIDITY : .0704325

TAIL ROTOR NOT PRESENT

PROCESSING DATE :6 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000960 +.67107(Ct)^1.5 +332.510(Ct)^3

STANDARD DEVIATION = 9.81412E-16
MEAN ERROR = 1.94000E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-.35	+2.10	0.00000	0.000000	0.00000
2	0.000	+0.0	+1135.07	+287.77	0.00000	0.000000	0.00000
3	0.000	+0.0	+.38	+.68	0.00000	0.000000	0.00000
4	0.000	+0.0	-.32	+0.00	0.00000	0.000000	0.00000
5	.650	-.0	+12.01	+37.48	.00202	.001349	.01262
6	.650	+2.1	+90.54	+46.75	.01525	.001686	.20958
7	.650	+4.1	+187.18	+66.68	.03151	.002404	.43674
8	.649	+5.7	+278.83	+92.18	.04712	.003336	.57543
9	.650	+6.1	+303.24	+101.76	.05108	.003670	.59026
10	.650	+7.1	+368.84	+124.77	.06215	.004502	.64587
11	.649	+7.1	+372.74	+126.09	.06285	.004553	.64947
12	.649	+8.2	+437.97	+153.04	.07383	.005524	.68148
13	.649	+9.1	+500.46	+183.44	.08444	.006628	.69479
14	.650	+10.3	+577.56	+230.37	.09723	.008305	.68512
15	.649	+9.8	+546.44	+212.33	.09216	.007668	.68467
16	.650	+9.6	+530.83	+203.66	.08944	.007348	.68311
17	.649	+9.3	+519.48	+196.43	.08756	.007090	.68583
18	.650	+9.1	+501.03	+187.16	.08437	.006748	.68145
19	.650	+8.9	+485.86	+178.87	.08182	.006450	.68090
20	.650	+8.5	+471.86	+170.38	.07944	.006142	.68405
21	.650	+8.3	+455.27	+160.90	.07657	.005795	.68619
22	.649	+7.9	+421.33	+147.85	.07104	.005338	.66565
23	.650	+7.6	+400.20	+139.60	.06741	.005035	.65233
24	.649	+6.8	+354.01	+120.60	.05968	.004353	.62844
25	.650	+6.5	+336.84	+113.70	.05675	.004102	.61848
26	.650	+6.4	+329.59	+110.61	.05551	.003989	.61527
27	.650	+5.1	+253.89	+86.27	.04273	.003109	.53311
28	.650	+3.2	+150.14	+59.35	.02523	.002136	.35212
29	.649	+.1	+20.62	+38.44	.00348	.001390	.02773
30	0.000	+.1	+.32	+0.00	0.00000	0.000000	0.00000
31	0.000	+.1	+.90	+1.95	0.00000	0.000000	0.00000
32	0.000	+.1	+1135.70	+287.71	0.00000	0.000000	0.00000
33	0.000	+.1	+.81	+.57	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 20 DATE :15 OCT 1982 OAT= 62 BAROMETER= 29.522 WET BULB TEMP= 54 DRY BULB TEMP= 62
WIND CONDITIONS :GUSTY/ SOUTH/ 0 TO 3 kts Z/R= 1.2
SUMMARY:S-76 MAIN W/ 20 Deg SWEEP & 60% TAPER/ EXTENDERS PRESENT

CONFIGURATION FILE : DATA2 S76[[[]WEXT/NoTail/*INACTIVE*
DATA FILE : TIP020:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.099996 in. = .258333 ft.
SOLIDITY : .0704325

TAIL ROTOR NOT PRESENT

PROCESSING DATE :6 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000968 +.67475(Ct)^1.5 +240.130(Ct)^3

STANDARD DEVIATION = 1.64606E-15
MEAN ERROR = -3.36000E-16

Pt:	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-2.94	+2.48	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.59	+297.22	0.00000	0.000000	0.00000
3	0.000	+0.0	-.18	+1.16	0.00000	0.000000	0.00000
4	0.000	+0.0	+.31	+.08	0.00000	0.000000	0.00000
5	.599	+.0	+9.09	+32.11	.00188	.001365	.01054
6	.599	+.0	+8.35	+32.14	.00166	.001366	.00927
7	.599	+2.1	+65.97	+38.11	.01310	.001620	.17361
8	.599	+4.1	+152.25	+54.98	.03023	.002338	.42192
9	.599	+6.0	+244.56	+80.89	.04856	.003440	.58390
10	.598	+7.2	+302.13	+101.33	.06006	.004313	.64036
11	.599	+8.1	+356.45	+121.93	.07078	.005185	.68164
12	.598	+9.1	+413.52	+147.80	.08224	.006294	.70312
13	.598	+10.1	+476.51	+176.38	.09472	.007508	.72867
14	.598	+11.1	+524.23	+206.73	.10438	.008815	.71798
15	.598	+10.6	+504.03	+194.75	.10019	.008290	.71792
16	.598	+10.3	+480.72	+182.03	.09565	.007755	.71579
17	.598	+9.8	+465.80	+170.59	.09262	.007264	.72827
18	.599	+9.6	+445.44	+161.91	.08848	.006894	.71703
19	.599	+9.3	+428.97	+153.99	.08519	.006548	.71256
20	.598	+9.0	+417.02	+146.45	.08286	.006231	.71834
21	.597	+8.8	+399.54	+140.39	.07962	.005991	.70378
22	.598	+8.3	+376.28	+129.97	.07486	.005537	.69410
23	.598	+8.3	+377.66	+129.40	.07519	.005517	.70134
24	.599	+7.8	+344.33	+116.97	.06837	.004973	.67454
25	.599	+7.5	+333.47	+112.08	.06621	.004765	.67095
26	.598	+7.3	+319.07	+106.29	.06349	.004529	.66293
27	.599	+6.8	+293.16	+96.50	.05821	.004103	.64236
28	.598	+5.1	+203.69	+68.49	.04048	.002915	.52439
29	.598	+.1	+5.51	+32.11	.00110	.001368	.00498
30	0.000	+.1	-.31	+.08	0.00000	0.000000	0.00000
31	0.000	+.1	-2.92	+2.33	0.00000	0.000000	0.00000
32	0.000	+.1	+1134.20	+288.21	0.00000	0.000000	0.00000
33	0.000	+.1	-.31	+.20	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN-# : 21 DATE :15 OCT 1982 OAT= 64.0 BAROMETER= 29.911 WET BULB TEMP= 55.7
DRY BULB TEMP= 64.0
WIND CONDITIONS :GUSTY/ SOUTH/ 0 TO 4 kts Z/R= 3
SUMMARY:S-76 MAIN W/ 20 Deg SWEEP & 60% TAPER/ EXTENDERS PRESENT_/MACH SWEEP

CONFIGURATION FILE : DATA2 S76IIIJwEXT/NoTail/*INACTIVE*
DATA FILE : TIP021:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.099996 in. = .258333 ft.
SOLIDITY : .0704325

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000948 +.66686(Ct)^1.5 +275.094(Ct)^3

STANDARD DEVIATION = 1.95959E-15
MEAN ERROR = -4.000000E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-2.24	+2.25	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.39	+287.20	0.00000	0.000000	0.00000
3	0.000	+0.0	-.37	+1.17	0.00000	0.000000	0.00000
4	0.000	+0.0	-.26	+.15	0.00000	0.000000	0.00000
5	.300	+.0	+3.48	+8.29	.00276	.001405	.01932
6	.300	+2.1	+19.84	+9.97	.01572	.001691	.21873
7	.300	+4.1	+39.63	+13.63	.03138	.002311	.45138
8	.300	+5.1	+50.81	+16.90	.04026	.002869	.52882
9	.300	+6.0	+60.43	+20.05	.04792	.003405	.57809
10	.299	+7.3	+76.12	+25.97	.06045	.004416	.63159
11	.299	+8.1	+89.10	+29.27	.07079	.004980	.70984
12	.300	+8.6	+94.32	+33.05	.07474	.005608	.68370
13	.300	+9.0	+100.74	+34.58	.07953	.005846	.71989
14	.300	+8.8	+97.94	+34.67	.07755	.005879	.68935
15	.300	+8.6	+95.63	+33.44	.07557	.005659	.68891
16	.300	+8.2	+92.11	+31.52	.07277	.005333	.69086
17	.300	+8.0	+88.49	+30.35	.07010	.005148	.67649
18	.300	+7.8	+86.08	+28.76	.06815	.004876	.68475
19	.299	+7.5	+81.07	+27.92	.06443	.004751	.64591
20	.299	+7.3	+79.30	+26.63	.06297	.004528	.65493
21	.300	+6.8	+74.79	+24.74	.05924	.004195	.64493
22	.300	+6.5	+70.73	+23.03	.05606	.003908	.63738
23	.300	+6.3	+67.85	+21.70	.05375	.003682	.63521
24	.300	+6.0	+62.18	+20.35	.04924	.003452	.59407
25	.300	+5.5	+58.57	+18.79	.04628	.003180	.58756
26	.300	+5.3	+55.45	+17.92	.04384	.003034	.56771
27	.300	+4.8	+48.40	+16.21	.03826	.002744	.51176
28	.300	+4.5	+43.56	+14.74	.03443	.002495	.48062
29	.299	-.0	+6.74	+8.56	.00536	.001455	.05056
30	0.000	-.0	+.26	+.15	0.00000	0.000000	0.00000
31	0.000	-.0	-2.24	+2.25	0.00000	0.000000	0.00000
32	0.000	-.0	+1135.02	+288.01	0.00000	0.000000	0.00000
33	0.000	-.0	+.26	+.33	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 22 DATE :15 OCT 1982 OAT= 65.5 BAROMETER= 29.502 WET BULB TEMP= 55.5
DRY BULB TEMP= 65.5
WIND CONDITIONS :GUSTY/ SOUTH/ 0 TO 4 kts Z/R= 3
SUMMARY:S-76 MAIN W/ 20 Deg SWEEP & 60% TAPER/ EXTENDERS PRESENT /MACH SWEEP

CONFIGURATION FILE : DATA2 S76(III)WEXT/NoTail/*INACTIVE*
DATA FILE : TIP022:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 56.04 in. = 4.67 ft.
  CHORD : 3.099996 in. = .258333 ft.
  SOLIDITY : .0784325

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000911 +.72645(Ct)^1.5 +158.789(Ct)^3

STANDARD DEVIATION = 7.90077E-15
MEAN ERROR = 1.76667E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-2.49	+2.30	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.77	+287.85	0.00000	0.000000	0.00000
3	0.000	+0.0	+.00	+.53	0.00000	0.000000	0.00000
4	0.000	+0.0	+.00	+.05	0.00000	0.000000	0.00000
5	.400	-.0	+6.67	+14.42	.00297	.001373	.02208
6	.400	+2.0	+32.16	+17.70	.01430	.001685	.19058
7	.401	+4.1	+72.75	+24.99	.03230	.002376	.45848
8	.400	+6.1	+111.24	+36.52	.04945	.003476	.59364
9	.401	+7.4	+134.58	+44.98	.05974	.004276	.64081
10	.400	+8.1	+158.07	+53.81	.07029	.005124	.68251
11	.400	+9.0	+177.63	+63.81	.07917	.006089	.68645
12	.400	+9.0	+179.46	+63.69	.07999	.006079	.69843
13	.399	+10.5	+213.49	+80.29	.09532	.007676	.71948
14	.400	+10.3	+209.94	+77.47	.09355	.007391	.72641
15	.400	+10.3	+210.85	+77.71	.09407	.007424	.72936
16	.400	+10.0	+202.84	+74.82	.09035	.007137	.71412
17	.400	+9.5	+194.32	+69.78	.08644	.006647	.71750
18	.400	+9.2	+183.02	+66.39	.08134	.006318	.68902
19	.400	+8.8	+173.45	+61.29	.07714	.005837	.68887
20	.400	+8.5	+167.94	+58.16	.07478	.005539	.69159
21	.400	+7.5	+147.52	+49.31	.06562	.004697	.67168
22	.400	+6.5	+120.93	+40.51	.05375	.003856	.60650
23	.400	+5.7	+106.49	+35.02	.04744	.003341	.58044
24	.401	+4.5	+80.67	+27.48	.03581	.002612	.48680
25	.400	+3.3	+58.27	+21.66	.02600	.002070	.38018
26	.401	+.0	+5.58	+14.78	0.00000	0.000000	0.00000
27	0.000	+.0	-.00	+.05	0.00000	0.000000	0.00000
28	0.000	+.0	-1.87	+2.15	0.00000	0.000000	0.00000
29	0.000	+.0	+1134.13	+288.03	0.00000	0.000000	0.00000
30	0.000	+.0	-.63	+.32	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 23 DATE :19 OCT 1982 OAT= 62 BAROMETER= 30.4 WET BULB TEMP= 53 DRY BU
LB TEMP= 61
WIND CONDITIONS :0 TO 3 kts/ SOUTH Z/R= .75
SUMMARY:S-76 BLADES/ 20 Deg SWEEP & 60 % TAPER W/ EXTENDERS

CONFIGURATION FILE : DATA2 S76[[[]wEXT/NoTail/*INACTIVE*
DATA FILE : TIP023:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.099996 in. = .258333 ft.
SOLIDITY : .0704325

TAIL ROTOR NOT PRESENT

PROCESSING DATE :6 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000967 +.63657(Ct)^1.5 +287.627(Ct)^3

STANDARD DEVIATION = 1.19231E-15
MEAN ERROR = -2.38462E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-5.70	+1.65	0.00000	0.000000	0.00000
2	0.000	+0.0	+1132.92	+287.89	0.00000	0.000000	0.00000
3	0.000	+0.0	-1.85	+.48	0.00000	0.000000	0.00000
4	0.000	+0.0	-1.85	+.30	0.00000	0.000000	0.00000
5	.601	+0.0	+1.62	+33.13	.00031	.001359	.00075
6	.601	+2.0	+47.60	+36.73	.00912	.001507	.10845
7	.601	+4.1	+146.94	+52.81	.02815	.002167	.40913
8	.600	+5.0	+191.59	+63.83	.03676	.002622	.50436
9	.600	+6.1	+255.54	+80.42	.04900	.003302	.61640
10	.601	+7.1	+306.99	+97.28	.05882	.003991	.67070
11	.600	+8.0	+361.68	+117.48	.06954	.004837	.71150
12	.599	+8.0	+366.19	+118.44	.07049	.004862	.71939
13	.600	+9.0	+427.73	+141.79	.08215	.005831	.75777
14	.599	+9.0	+422.98	+142.21	.08139	.005859	.74366
15	.600	+10.0	+486.57	+171.82	.09352	.007072	.75894
16	.600	+10.5	+517.64	+186.41	.09945	.007668	.76745
17	.600	+10.8	+532.16	+194.03	.10208	.007970	.76798
18	.600	+11.0	+552.83	+204.26	.10615	.008399	.77278
19	.600	+10.8	+538.22	+196.28	.10340	.008074	.77275
20	.601	+10.5	+517.98	+187.28	.09927	.007685	.76369
21	.600	+10.2	+500.57	+179.80	.09602	.007386	.75603
22	.601	+9.7	+472.66	+164.38	.09050	.006740	.75809
23	.600	+9.6	+466.16	+159.76	.08939	.006560	.76453
24	.600	+9.3	+448.36	+151.99	.08598	.006241	.75804
25	.601	+9.0	+438.57	+145.06	.08254	.005954	.74734
26	.600	+8.8	+415.61	+137.79	.07970	.005658	.74622
27	.601	+7.5	+348.48	+108.60	.06523	.004456	.70160
28	.600	+6.6	+287.99	+90.26	.05526	.003709	.65733
29	.600	+5.5	+227.66	+72.77	.04373	.002993	.57334
30	.601	+1.1	+28.38	+34.84	.00543	.001427	.05260
31	0.000	+1.1	+1.85	+.30	0.00000	0.000000	0.00000
32	0.000	+1.1	-1.22	+1.50	0.00000	0.000000	0.00000
33	0.000	+1.1	+1136.98	+287.65	0.00000	0.000000	0.00000
34	0.000	+1.1	+1.85	+.63	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN #: 24 DATE :19 OCT 1982 OAT= 63 BAROMETER= 30.342 WET BULB TEMP= 55 DRY BULB TEMP= 62.5
WIND CONDITIONS :LIGHT, 0 TO 2 kts/SOUTHERLY R/R= 3
SUMMARY:H-34 CALIBRATION RUN W/ FUSELAGE

CONFIGURATION FILE : DATA5 H34CIII/NoTail/**INACTIVE**
DATA FILE : TIP024:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 54.24996 in. = 4.52083 ft.
CHORD : 4.250004 in. = .354167 ft.
SOLIDITY : .099747

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001169 +.93023(Ct)^1.5 +108.602(Ct)^3

STANDARD DEVIATION = 6.92309E-15
MEAN ERROR = 1.38462E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-1.91	+1.43	0.00000	0.000000	0.00000
2	0.000	+0.0	+1133.56	+208.18	0.00000	0.000000	0.00000
3	0.000	+0.0	-1.20	+.20	0.00000	0.000000	0.00000
4	0.000	+0.0	+.07	+.08	0.00000	0.000000	0.00000
5	.601	+.1	+2.63	+36.04	.00038	.001150	.00144
6	.601	+2.1	+61.04	+42.79	.00882	.001367	.13523
7	.601	+3.1	+117.14	+54.20	.01693	.001733	.28393
8	.601	+4.0	+170.38	+68.24	.02459	.002178	.39525
9	.601	+5.2	+232.38	+88.41	.03359	.002827	.48634
10	.601	+6.0	+288.23	+108.44	.04169	.003470	.54797
11	.600	+7.2	+361.39	+139.11	.05231	.004454	.59985
12	.600	+8.2	+429.23	+170.86	.06214	.005446	.63522
13	.601	+9.1	+484.32	+200.38	.07003	.006409	.64578
14	.601	+9.8	+481.75	+189.42	.06668	.006051	.63552
15	.601	+9.6	+452.85	+183.45	.06523	.005855	.63538
16	.601	+9.1	+487.58	+202.08	.07041	.006453	.64665
17	.601	+8.5	+455.66	+183.69	.06571	.005859	.64197
18	.601	+8.3	+433.08	+173.98	.06249	.005550	.62852
19	.601	+8.0	+417.07	+164.72	.06016	.005255	.62701
20	.602	+7.8	+403.81	+158.32	.05817	.005045	.62109
21	.601	+7.5	+381.91	+149.35	.05514	.004770	.60627
22	.601	+7.3	+372.26	+144.16	.05384	.004612	.60497
23	.601	+7.0	+354.72	+136.32	.05115	.004348	.59417
24	.601	+6.5	+324.25	+123.35	.04683	.003941	.57432
25	.601	+6.0	+287.28	+109.28	.04148	.003490	.54056
26	.602	+5.5	+260.63	+98.47	.03747	.003131	.51724
27	.602	+4.5	+199.04	+78.21	.02868	.002493	.43517
28	.600	+3.5	+140.71	+61.67	.02037	.001975	.32879
29	.602	+2.5	+97.92	+51.07	.01411	.001628	.22995
30	.601	+1.5	+45.68	+41.92	.00659	.001338	.09933
31	0.000	+1.5	-.07	+.08	0.00000	0.000000	0.00000
32	0.000	+1.5	-1.41	+1.13	0.00000	0.000000	0.00000
33	0.000	+1.5	+1133.57	+208.21	0.00000	0.000000	0.00000
34	0.000	+1.5	-.19	+.20	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 25 DATE :20 OCTOBER 1982 10:21 OAT= 60 BAROMETER= 30.3 WET BULB TEMP= 57 DRY BULB TEMP= 60
WIND CONDITIONS :LIGHT 0 to 2 kts/ SOUTH2/R= 3
SUMMARY:S-70 BLADES W/ 20 Deg 35 Deg DOUBLE SWEPT TIPS

CONFIGURATION FILE : DATA1 $70[1]WEXT/NoTail/+INACTIVE=
DATA FILE : TIP025:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.22396 in. = 4.68533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0815251

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001003 +.69623(Ct)^1.5 +215.175(Ct)^3

STANDARD DEVIATION = 1.19896E-15
MEAN ERROR = 2.50000E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-2.00	+1.50	0.00000	0.000000	0.00000
2	0.000	+0.0	+1135.13	+288.22	0.00000	0.000000	0.00000
3	0.000	+0.0	+.37	+.15	0.00000	0.000000	0.00000
4	0.000	+0.0	+.77	+.09	0.00000	0.000000	0.00000
5	.599	-.2	-7.49	+35.11	-.00125	.001246	.00712
6	.599	+.2	+12.53	+34.99	.00208	.001241	.01545
7	.599	+2.1	+65.53	+40.45	.01087	.001432	.15978
8	.599	+4.1	+153.34	+57.79	.02546	.002049	.40050
9	.599	+5.0	+208.95	+71.36	.03466	.002526	.51569
10	.599	+6.0	+262.34	+88.34	.04352	.003128	.58600
11	.600	+7.0	+327.43	+111.36	.05426	.003938	.64789
12	.599	+8.1	+382.15	+136.08	.06352	.004828	.66949
13	.599	+9.1	+458.72	+169.75	.07629	.006026	.70607
14	.600	+10.1	+518.11	+202.10	.08587	.007149	.71965
15	.597	+10.6	+547.37	+220.29	.09135	.007847	.71044
16	.598	+10.1	+522.58	+204.59	.08707	.007277	.71287
17	.598	+9.7	+501.80	+192.62	.08349	.006840	.71207
18	.599	+9.4	+481.36	+181.43	.07997	.006433	.70976
19	.599	+9.0	+453.16	+166.33	.07514	.005886	.70644
20	.599	+8.7	+434.96	+158.59	.07229	.005625	.69756
21	.599	+8.3	+409.07	+146.32	.06787	.005181	.68897
22	.600	+7.8	+372.17	+131.07	.06162	.004632	.66674
23	.599	+7.3	+339.83	+118.68	.05648	.004210	.64372
24	.598	+7.3	+341.11	+118.32	.05682	.004206	.65006
25	.598	+7.3	+343.20	+119.70	.05714	.004254	.64834
26	.599	+6.5	+294.50	+100.04	.04885	.003542	.61542
27	.599	+4.5	+183.71	+65.93	.03051	.002337	.46842
28	.599	-.0	+7.48	+36.13	.00124	.001282	.00691
29	0.000	-.0	-.77	+.09	0.00000	0.000000	0.00000
30	0.000	-.0	-2.00	+1.47	0.00000	0.000000	0.00000
31	0.000	-.0	+1134.48	+287.92	0.00000	0.000000	0.00000
32	0.000	-.0	-.77	+.51	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 26 DATE :20 OCTOBER 1982 :11:22 OAT= 65 BAROMETER= 30.29 WET BULB TEM
P= 59.5 DRY BULB TEMP= 65
WIND CONDITIONS :LIGHT 0 to 3 kts/ NORTHZ/R= 3
SUMMARY:8-70 BLADES W/ 20 Deg/ 35 Deg DOUBLE SWEPT TIPS

CONFIGURATION FILE : DATA1 $70[[[]WEXT/NoTail *INACTIVE*
DATA FILE : TIP026:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.22396 in. = 4.68533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0815251

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000995 +.69392(Ct)^1.5 +209.496(Ct)^3

STANDARD DEVIATION = 2.59774E-15
MEAN ERROR = 5.416675E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-.72	+1.87	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.89	+287.64	0.00000	0.000000	0.00000
3	0.000	+0.0	+.13	+.73	0.00000	0.000000	0.00000
4	0.000	+0.0	-.12	+.22	0.00000	0.000000	0.00000
5	.550	-.0	+10.77	+29.26	.00212	.001231	.01605
6	.550	+1.9	+55.99	+33.91	.01102	.001424	.16392
7	.550	+3.5	+112.25	+44.98	.02212	.001892	.35111
8	.550	+4.7	+165.91	+57.76	.03258	.002427	.48923
9	.550	+5.8	+186.02	+63.46	.03671	.002673	.53127
10	.550	+6.8	+231.71	+77.29	.04567	.003251	.60604
11	.550	+7.8	+280.94	+95.20	.05542	.004008	.65719
12	.550	+8.8	+334.89	+118.18	.06608	.004971	.68867
13	.550	+9.8	+383.15	+142.48	.07556	.005997	.69926
14	.549	+10.8	+440.31	+171.21	.08692	.007214	.71723
15	.550	+10.5	+471.59	+189.86	.09297	.007955	.71947
16	.550	+10.2	+452.87	+178.26	.08931	.007503	.71917
17	.550	+10.0	+441.95	+170.82	.08712	.007187	.72235
18	.550	+9.7	+426.79	+163.29	.08418	.006874	.71732
19	.550	+9.5	+414.30	+157.62	.08165	.006630	.71844
20	.549	+9.3	+399.58	+149.88	.07888	.006312	.70870
21	.549	+9.3	+403.28	+150.61	.07967	.006350	.71494
22	.448	+9.8	+398.52	+144.01	0.00000	0.000003	0.00000
23	.550	+8.7	+371.15	+135.64	.07311	.005703	.69990
24	.550	+7.7	+316.21	+111.16	.06227	.004672	.67147
25	.550	+6.5	+259.47	+87.25	.05106	.003664	.63567
26	.550	+5.5	+210.89	+71.65	.04153	.003012	.56741
27	.550	+4.5	+161.62	+56.95	.03187	.002397	.47927
28	.550	+2.6	+75.83	+38.65	.01494	.001625	.22690
29	.550	+.0	+13.98	+30.13	.00276	.001267	.02304
30	0.000	+.0	+.12	+.22	0.00000	0.000000	0.00000
31	0.000	+.0	-.10	+1.57	0.00000	0.000000	0.00000
32	0.000	+.0	+1135.00	+288.18	0.00000	0.000000	0.00000
33	0.000	+.0	-.38	+.19	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 27 DATE :20 OCTOBER 1982 OAT= 69 BAROMETER= 30.92 WET BULB TEMP= 60 D
RY BULB TEMP= 69
WIND CONDITIONS :GUSTY 0-5 / SOUTHERLY2/R= 3
SUMMARY:S-79 MAIN WITH 20deg-35deg DOUBLE SWEPT TIPS

CONFIGURATION FILE : DATA1 S79[[[]WEKT/NoTail-*INACTIVE*
DATA FILE : TIP027:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.22396 in. = 4.68533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0815251

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001020 +.69429(Ct)^1.5 +235.525(Ct)^3

STANDARD DEVIATION = 1.87469E-15
MEAN ERROR = 4.09091E-16

Pt.	Tip Mo	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-.17	+1.40	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.51	+288.12	0.00000	0.000000	0.00000
3	0.000	+0.0	-.25	+.26	0.00000	0.000000	0.00000
4	0.000	+0.0	+.26	+.29	0.00000	0.000000	0.00000
5	.650	+.1	-6.05	+42.30	-.00085	.001275	.00395
6	.650	+2.0	+68.45	+45.84	.00967	.001382	.13891
7	.650	+4.0	+173.97	+67.18	.02459	.002027	.38417
8	.650	+6.1	+308.56	+103.28	.04249	.003116	.56742
9	.651	+7.0	+378.09	+128.22	.05331	.003859	.64406
10	.650	+8.0	+444.97	+159.58	.06283	.004809	.66115
11	.650	+9.0	+525.04	+195.74	.07424	.005907	.69133
12	.649	+9.6	+573.41	+220.32	.08114	.006654	.70129
13	.649	+9.6	+573.37	+219.38	.08128	.006635	.70511
14	.651	+5.0	+231.15	+83.17	.03259	.002503	.47462
15	.651	+3.0	+114.34	+54.39	.01612	.001636	.25242
16	.650	+5.5	+265.49	+91.88	.03745	.002766	.52901
17	.649	+9.5	+554.66	+212.78	.07859	.006433	.69154
18	.650	+8.6	+497.47	+178.25	.07019	.005368	.69945
19	.651	+7.5	+408.48	+142.08	.05759	.004276	.65265
20	.650	+6.5	+341.02	+116.01	.04810	.003492	.60989
21	.649	+9.1	+518.40	+192.62	.07344	.005824	.68991
22	.651	+.2	+3.30	+43.74	.00047	.001316	.00154
23	.649	+8.8	+498.96	+183.23	.06950	.005536	.66820
24	.650	+8.6	+487.26	+176.54	.06890	.005328	.68535
25	.651	+8.0	+436.21	+156.79	.06149	.004717	.65259
26	.650	+8.3	+465.35	+166.33	.06579	.005019	.67881
27	0.000	+8.3	-.26	+.29	0.00000	0.000000	0.00000
28	0.000	+8.3	+.45	+1.10	0.00000	0.000000	0.00000
29	0.000	+8.3	+1134.38	+287.91	0.00000	0.000000	0.00000
30	0.000	+8.3	-.26	+.41	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 28 DATE :21 OCTOBER 1982 OAT= 61 BAROMETER= 30.011 WET BULB TEMP= 59
DRY BULB TEMP= 61
WIND CONDITIONS :LIGHT - 0 to 2 kts Z/R= .75
SUMMARY:5-79 BLADES WITH -20 Deg/ 35 Deg DOUBLE SWEPT TIPS

CONFIGURATION FILE : DATA1 STOCIIIWEKT/NoTail +INACTIVE+
DATA FILE : TIP028:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.22396 in. = 4.68533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0819251

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001056 +.66405(Ct)^1.5 +166.292(Ct)^3

STANDARD DEVIATION = 2.93939E-15
MEAN ERROR = -6.00000E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+1.41	+1.29	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.48	+288.28	0.00000	0.000000	0.00000
3	0.000	+0.0	-.36	+.09	0.00000	0.000000	0.00000
4	0.000	+0.0	-.49	+.51	0.00000	0.000000	0.00000
5	.600	-.1	+1.10	+35.69	.00018	.001271	.00040
6	.601	+2.2	+70.81	+42.13	.01160	.001500	.16988
7	.601	+4.0	+164.55	+60.79	.02743	.002163	.42414
8	.601	+5.0	+222.90	+75.60	.03715	.002689	.53752
9	.601	+6.0	+286.59	+94.82	.04777	.003374	.62479
10	.601	+7.0	+356.30	+119.24	.05939	.004242	.68889
11	.602	+8.1	+422.56	+146.94	.07026	.005215	.72106
12	.600	+9.0	+491.13	+179.03	.08211	.006388	.74359
13	.600	+10.0	+556.92	+212.98	.09304	.007594	.75450
14	.600	+10.5	+593.09	+232.56	.09913	.008296	.75956
15	.600	+10.3	+575.10	+222.81	.09597	.007907	.75913
16	.600	+10.1	+563.64	+215.41	.09422	.007685	.75977
17	.599	+9.8	+549.53	+207.61	.09201	.007419	.75950
18	.600	+9.5	+521.56	+193.91	.08714	.006915	.75110
19	.601	+9.1	+498.52	+181.37	.08318	.006459	.74988
20	.601	+8.8	+474.93	+171.03	.07908	.006078	.73869
21	.601	+8.6	+462.37	+164.61	.07708	.005857	.73770
22	.600	+8.2	+442.44	+155.64	.07386	.005546	.73081
23	.601	+7.5	+391.40	+133.99	.06525	.004768	.70586
24	.601	+6.6	+324.47	+108.89	.05409	.003874	.65554
25	.601	+5.5	+257.23	+86.25	.04284	.003066	.58344
26	.601	+4.6	+200.08	+70.80	.03338	.002521	.48843
27	.601	+3.5	+144.78	+57.37	.02416	.002043	.37104
28	.601	+2.5	+85.09	+46.87	.01420	.001669	.20461
29	.601	+.1	+9.77	+37.10	.00163	.001319	.01006
30	0.000	+.1	+.49	+.51	0.00000	0.000000	0.00000
31	0.000	+.1	+3.28	+1.14	0.00000	0.000000	0.00000
32	0.000	+.1	+1135.50	+287.28	0.00000	0.000000	0.00000
33	0.000	+.1	+1.11	+1.02	0.00000	0.000000	0.00000

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 29 DATE :21 OCTOBER 1982 09:32 OAT= 61.9 BAROMETER= 30.012 WET BULB TEMP= 59 DRY BULB TEMP= 61.5
WIND CONDITIONS :LIGHT / 0 to 2 kts Z/R= 1.2
SUMMARY:8-79 BLADES WITH 20 Deg/ 35 Deg DOUBLE SWEPT TIPS

CONFIGURATION FILE : DATA: $79CIII)WEKT/NoTail/*INACTIVE=
DATA FILE : TIP029:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.22396 in. = 4.68533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0819281

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001009 +.70518(Ct)^1.5 +158.233(Ct)^3

STANDARD DEVIATION = 1.92308E-16
MEAN ERROR = -3.84615E-17

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+1.35	+1.32	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.07	+296.84	0.00000	0.000000	0.00000
3	0.000	+0.0	-.69	+1.53	0.00000	0.000000	0.00000
4	0.000	+0.0	-.56	+.15	0.00000	0.000000	0.00000
5	.600	-.2	-1.88	+35.30	-.00031	.001257	.00089
6	.600	+1.9	+64.59	+40.49	.01081	.001446	.15687
7	.600	+3.5	+125.98	+52.40	.02105	.001869	.32996
8	.600	+4.8	+153.58	+58.47	.02567	.002085	.39809
9	.600	+5.8	+210.27	+72.21	.03516	.002577	.51650
10	.600	+6.9	+270.64	+90.64	.04528	.003237	.60101
11	.600	+7.8	+335.46	+113.99	.05605	.004065	.65908
12	.600	+8.8	+406.24	+143.96	.06795	.005136	.69635
13	.599	+9.8	+473.12	+175.22	.07922	.006262	.71893
14	.600	+10.1	+544.42	+213.07	.09106	.007608	.72939
15	.600	+10.5	+575.57	+227.65	.09619	.008120	.74177
16	.600	+10.2	+554.03	+218.02	.09265	.007781	.73170
17	.600	+10.0	+542.27	+209.56	.09073	.007483	.73732
18	.600	+9.7	+525.46	+200.46	.08794	.007152	.73489
19	.600	+9.4	+505.71	+190.98	.08463	.006813	.72826
20	.600	+9.2	+486.34	+182.03	.08163	.006497	.71794
21	.600	+9.0	+471.45	+174.92	.07888	.006240	.71570
22	.600	+8.7	+454.91	+167.33	.07603	.005968	.70912
23	.600	+8.5	+435.96	+158.02	.07284	.005635	.70435
24	.600	+8.2	+423.09	+150.94	.07072	.005385	.70514
25	.600	+7.4	+373.00	+129.21	.06228	.004605	.68149
26	.600	+6.5	+304.47	+103.46	.05093	.003693	.62824
27	.600	+5.5	+250.40	+84.46	.04189	.003016	.57400
28	.600	+3.9	+157.93	+59.85	.02636	.002132	.48533
29	.600	+1.6	+57.42	+40.25	.00960	.001437	.13225
30	.600	+.2	+20.85	+36.59	.00348	.001304	.03181
31	0.000	+.2	+.56	+.15	0.00000	0.000000	0.00000
32	0.000	+.2	+2.60	+1.05	0.00000	0.000000	0.00000
33	0.000	+.2	+1135.57	+297.95	0.00000	0.000000	0.00000
34	0.000	+.2	+.93	+.57	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 30 DATE :21 OCTOBER 1982 / 12:40 OAT= 61.5 BAROMETER= 30.029 WET BULB TEMP= 0 DRY BULB TEMP= 61.5
WIND CONDITIONS :LIGHT , 0 to 3 kts Z/R= 3
SUMMARY:M 34 CALIBRATION -2

CONFIGURATION FILE : DATA5 H34[III]/NoTail/**INACTIVE**
DATA FILE : TIP030:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 54.24996 in. = 4.52083 ft.
CHORD : 4.250004 in. = .354167 ft.
SOLIDITY : .099747

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001133 +.86959(Ct)^1.5 +64.643(Ct)^3

STANDARD DEVIATION = 2.91618E-15
MEAN ERROR = 6.36364E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-1.14	+1.58	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.21	+287.25	0.00000	0.000000	0.00000
3	0.000	+0.0	-.56	+1.13	0.00000	0.000000	0.00000
4	0.000	+0.0	+.05	+.08	0.00000	0.000000	0.00000
5	.600	+.0	+1.84	+35.04	.00027	.001127	.00007
6	.601	+2.1	+43.47	+38.70	.00631	.001242	.09007
7	.601	+4.1	+143.09	+60.85	.02078	.001955	.34230
8	.600	+5.3	+207.43	+80.59	.03016	.002592	.45128
9	.601	+6.1	+257.32	+98.45	.03739	.003164	.51026
10	.601	+7.1	+331.43	+125.88	.04813	.004044	.58319
11	.600	+8.4	+401.96	+161.47	.05844	.005193	.60757
12	.600	+9.2	+454.14	+186.89	.06604	.006012	.63047
13	.600	+9.7	+495.40	+206.76	.07213	.006659	.64969
14	.600	+9.4	+482.92	+200.37	.07032	.006454	.64529
15	.601	+8.9	+448.59	+183.26	.06520	.005892	.63106
16	.600	+8.6	+424.45	+170.81	.06187	.005508	.62406
17	.600	+7.6	+359.65	+139.44	.05244	.004497	.59630
18	.600	+6.9	+293.20	+111.35	.04267	.003585	.54912
19	.600	+5.6	+236.37	+89.96	.03439	.002898	.49196
20	.600	+4.6	+175.01	+70.42	.02544	.002265	.40824
21	.600	+3.6	+122.49	+56.26	.01781	.001811	.29323
22	.601	+2.6	+77.63	+45.78	.01128	.001471	.18178
23	.601	+1.2	+24.55	+37.65	.00357	.001210	.03933
24	.600	+8.2	+384.81	+153.49	.05596	.004938	.59878
25	.600	+8.8	+430.42	+175.16	.06258	.005633	.62063
26	.601	+.3	+1.69	+36.27	.00025	.001165	.00074
27	0.000	+.3	-.05	+.08	0.00000	0.000000	0.00000
28	0.000	+.3	-1.14	+1.43	0.00000	0.000000	0.00000
29	0.000	+.3	+1134.07	+287.94	0.00000	0.000000	0.00000
30	0.000	+.3	-.56	+.44	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 31 DATE :21 OCTOBER 1982 / 14:47 OAT= 60 BAROMETER= 30.022 WET BULB T
EMP= 49.5 DRY BULB TEMP= 60
WIND CONDITIONS :GUSTY/ 0 to 4 kts Z/R= 3
SUMMARY:H-34 CALIBRATION #2A

CONFIGURATION FILE : DATA5 H34[1:]/NoTall/**INACTIVE**
DATA FILE : TIP031:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 54.24996 in. = 4.52083 ft.
CHORD : 4.250004 in. = .354167 ft.
SOLIDITY : .099747

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001113 +.83544(Ct)^1.5 +84.916(Ct)^3

STANDARD DEVIATION = 1.87469E-15
MEAN ERROR = -4.09091E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-2.51	+1.60	0.00000	0.000000	0.00000
2	0.000	+0.0	+1131.74	+298.12	0.00000	0.000000	0.00000
3	0.000	+0.0	-3.02	+.25	0.00000	0.000000	0.00000
4	0.000	+0.0	-3.16	+.40	0.00000	0.000000	0.00000
5	.600	-.9	+3.20	+34.51	.00047	.001116	.00202
6	.601	+1.2	+42.99	+37.66	.00627	.001215	.09127
7	.601	+3.2	+144.99	+60.04	.02115	.001937	.35454
8	.600	+5.2	+263.75	+97.06	.03857	.003140	.53981
9	.601	+6.2	+330.72	+124.45	.04831	.004021	.59973
10	.600	+7.2	+393.09	+152.67	.05759	.004948	.62382
11	.601	+8.2	+457.67	+184.41	.06690	.005962	.64806
12	.600	+6.7	+363.31	+137.95	.05312	.004462	.61286
13	.601	+5.7	+299.85	+111.49	.04365	.003600	.56582
14	.600	+4.2	+208.12	+78.48	.03044	.002536	.46759
15	.600	+8.7	+499.89	+204.81	.07315	.006630	.66648
16	.601	+8.4	+476.81	+194.81	.06968	.006265	.65468
17	.601	+7.4	+408.74	+159.00	.05975	.005142	.63440
18	.601	+5.4	+283.00	+105.16	.04128	.003393	.55204
19	.601	+7.2	+399.36	+153.79	.05830	.004966	.63306
20	.601	+4.8	+248.77	+89.77	.03512	.002897	.50749
21	.601	+7.2	+398.10	+153.34	.05810	.004950	.63180
22	.600	+8.7	+493.84	+202.85	.07224	.006538	.66325
23	.601	+8.4	+471.78	+192.33	.06882	.006206	.64967
24	.601	+6.7	+362.83	+138.78	.05293	.004476	.60765
25	.601	+7.7	+429.60	+168.91	.06271	.005451	.64340
26	.601	-.4	+7.66	+35.86	.00112	.001139	.00722
27	0.000	-.4	+3.16	+.40	0.00000	0.000000	0.00000
28	0.000	-.4	+1.84	+1.45	0.00000	0.000000	0.00000
29	0.000	-.4	+1136.88	+297.25	0.00000	0.000000	0.00000
30	0.000	-.4	+2.41	+.97	0.00000	0.000000	0.00000

RUN # : 32 DATE :21 OCT 1982 OAT= 58.5 BAROMETER= 30.035 WET BULB TEMP= 48.5
DRY BULB TEMP= 58.5
WIND CONDITIONS :LIGHT/VARIED Z/R= 3
SUMMARY:CALIBRATION RUN

CONFIGURATION FILE : DATA5 H34CIII/NoTail/**INACTIVE**
DATA FILE : TIP032:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 54.24996 in. = 4.52083 ft.
  CHORD : 4.250004 in. = .354167 ft.
  SOLIDITY : .099747

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001141 +.95656(Ct)^1.5 +77.292(Ct)^3

STANDARD DEVIATION = 3.72322E-15
MEAN ERROR = -7.60000E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-1.22	+1.64	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.37	+287.70	0.00000	0.000000	0.00000
3	0.000	+0.0	-.39	+.68	0.00000	0.000000	0.00000
4	0.000	+0.0	-.00	+.23	0.00000	0.000000	0.00000
5	.602	+.0	+1.04	+35.28	.00015	.001134	.00037
6	.602	+2.1	+48.46	+39.57	.00703	.001271	.10369
7	.602	+4.0	+148.53	+62.02	.02158	.001993	.35515
8	.602	+6.0	+263.09	+99.81	.03823	.003208	.52032
9	.602	+7.1	+331.11	+127.33	.04812	.004094	.57591
10	.602	+8.0	+391.74	+154.58	.05693	.004967	.61082
11	.602	+9.1	+459.19	+188.17	.06681	.006056	.63681
12	.601	+10.0	+525.67	+224.37	.07657	.007230	.65455
13	.601	+9.7	+506.87	+213.59	.07371	.006881	.64945
14	.602	+9.5	+490.65	+204.88	.07137	.006590	.64618
15	.602	+9.2	+477.04	+197.00	.06942	.006341	.64419
16	.602	+9.0	+460.97	+188.74	.06704	.006071	.63944
17	.602	+8.7	+444.74	+179.41	.06465	.005768	.63634
18	.602	+8.5	+432.23	+173.28	.06287	.005576	.63145
19	.602	+8.2	+412.63	+163.99	.05996	.005268	.62241
20	.602	+8.0	+399.03	+157.89	.05800	.005076	.61451
21	.602	+7.7	+377.84	+147.92	.05495	.004759	.60454
22	.602	+7.5	+363.16	+141.17	.05283	.004543	.59698
23	.602	+7.2	+343.54	+132.89	.04999	.004277	.58356
24	.602	+6.9	+328.80	+126.16	.04780	.004057	.57526
25	.602	+6.4	+297.81	+112.81	.04326	.003624	.55436
26	.602	+5.5	+241.00	+92.28	.03501	.002966	.49340
27	.602	+4.4	+177.54	+71.68	.02580	.002301	.40210
28	.602	+3.5	+130.66	+58.42	.01898	.001878	.31111
29	.602	+1.7	+47.80	+41.04	.00696	.001321	.09806
30	0.000	+1.7	+.00	+.23	0.00000	0.000000	0.00000
31	0.000	+1.7	-1.21	+1.28	0.00000	0.000000	0.00000
32	0.000	+1.7	+1134.39	+287.67	0.00000	0.000000	0.00000
33	0.000	+1.7	-.00	+.68	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 33 DATE :22 OCTOBER 1982 / 14:44 OAT= 52.5 BAROMETER= 30.22 WET BULB TEMP= 44 DRY BULB TEMP= 52.5
WIND CONDITIONS :GUSTY 0 TO 4 kts NNW Z/R= 3
SUMMARY:3-76 BLADES W/ 20 Deg SWEPT TIPS

CONFIGURATION FILE : DATA2 976[[[]WEXT/NoT[illegible]*INACTIVE*
DATA FILE : TIP033:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.099996 in. = .258333 ft.
SOLIDITY : .0704329

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001011 +.68116(Ct)^1.5 +308.278(Ct)^3

STANDARD DEVIATION = 2.03931E-15
MEAN ERROR = 4.34783E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-6.40	+1.74	0.00000	0.000000	0.00000
2	0.000	+0.0	+1132.77	+287.74	0.00000	0.000000	0.00000
3	0.000	+0.0	-1.99	+.63	0.00000	0.000000	0.00000
4	0.000	+0.0	-.48	+.24	0.00000	0.000000	0.00000
5	.601	+.0	-7.67	+35.43	-.00147	.001457	.00728
6	.602	+1.9	+40.79	+36.24	.00781	.001486	.08718
7	.601	+4.0	+127.25	+52.50	.02449	.002164	.33242
8	.601	+5.0	+182.93	+64.59	.03518	.002659	.46555
9	.601	+6.2	+241.62	+82.56	.04652	.003404	.55315
10	.601	+7.0	+294.50	+100.56	.05671	.004147	.61116
11	.601	+8.1	+354.16	+123.73	.06801	.005088	.65421
12	.601	+9.0	+413.68	+151.48	.07965	.006248	.67548
13	.601	+9.5	+442.73	+167.38	.08520	.006897	.67664
14	.600	+9.5	+446.72	+167.11	.08614	.006900	.68759
15	.599	+10.0	+475.13	+185.38	.09162	.007672	.68065
16	.600	+10.0	+480.89	+187.09	.09252	.007720	.68404
17	.600	+9.8	+462.74	+178.45	.08913	.007360	.67847
18	.600	+9.8	+462.81	+178.66	.08918	.007384	.67679
19	.602	+9.8	+467.38	+178.81	.08957	.007339	.68547
20	.600	+9.4	+445.96	+169.36	.08601	.006994	.67677
21	.600	+9.2	+432.39	+162.84	.08337	.006690	.67521
22	.601	+9.1	+420.86	+154.27	.08090	.006362	.67874
23	.601	+8.4	+382.75	+137.89	.07361	.005679	.66002
24	.601	+7.5	+327.32	+114.75	.06285	.004718	.62669
25	.601	+6.5	+266.47	+91.20	.05119	.003752	.57932
26	.601	+5.5	+212.84	+73.77	.04072	.003034	.50831
27	.602	+.0	-5.61	+36.45	-.00108	.001495	.00442
28	0.000	+.0	+.48	+.24	0.00000	0.000000	0.00000
29	0.000	+.0	-3.31	+1.29	0.00000	0.000000	0.00000
30	0.000	+.0	+1135.25	+288.22	0.00000	0.000000	0.00000
31	0.000	+.0	+.48	+.15	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 34 DATE :25 OCTOBER 1982 · 08:42 OAT= 43 BAROMETER= 30.32 WET BULB TE
MP= 39 DRY BULB TEMP= 43
WIND CONDITIONS :VARIED 0 to 4 kts/ NORTH Z/R= 3
SUMMARY:3-76 BLADES W/ 20 Deg SWEPT TIPS/ RPT OF TIP033

CONFIGURATION FILE : DATA2 876[[[]WEXT/NoTail/*INACTIVE*
DATA FILE : TIP034:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.099996 in. = .258333 ft.
SOLIDITY = .0704325

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001021 +.66677(Ct)^1.5 +296.785(Ct)^3

STANDARD DEVIATION = 9.38083E-15
MEAN ERROR = 2.00000E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-2.67	+1.17	0.00000	0.000000	0.00000
2	0.000	+0.0	+1133.46	+298.22	0.00000	0.000000	0.00000
3	0.000	+0.0	-1.30	+.15	0.00000	0.000000	0.00000
4	0.000	+0.0	-1.67	+.36	0.00000	0.000000	0.00000
5	.600	+.0	-3.62	+35.18	-.00070	.001448	.00238
6	.600	+2.2	+62.39	+39.71	.01199	.001634	.15080
7	.601	+4.0	+142.77	+55.30	.02740	.002273	.37454
8	.601	+6.0	+253.09	+85.50	.04858	.003514	.57175
9	.601	+6.0	+256.26	+86.58	.04921	.003560	.57545
10	.600	+7.5	+343.82	+117.71	.06616	.004850	.65843
11	.600	+7.5	+338.72	+116.42	.06516	.004795	.65089
12	.600	+7.5	+336.38	+116.30	.06471	.004792	.64467
13	.601	+8.3	+386.92	+137.53	.07424	.005651	.67182
14	.600	+8.3	+392.67	+139.88	.07546	.005720	.68010
15	.600	+9.0	+432.78	+156.52	.08321	.006526	.69018
16	.600	+9.0	+431.73	+157.23	.08315	.006485	.69391
17	.599	+10.0	+495.65	+194.12	.09555	.008013	.69178
18	.599	+10.0	+503.12	+197.12	.09710	.008146	.69702
19	.600	+9.2	+449.38	+169.15	.08636	.006919	.68827
20	.601	+8.5	+415.51	+158.60	.07976	.006190	.68285
21	.600	+7.6	+362.01	+125.41	.06957	.005161	.66723
22	.601	+6.5	+297.61	+98.06	.05523	.004032	.60406
23	.601	+5.6	+234.54	+81.21	.04495	.003333	.53665
24	.601	+4.5	+179.78	+64.09	.03451	.002635	.45674
25	.601	+3.0	+104.38	+47.95	.02001	.001968	.26986
26	.600	+9.4	+466.23	+175.79	.08966	.007239	.69598
27	.600	+.1	+1.43	+35.81	.00027	.001474	.00058
28	0.000	+.1	+1.67	+.36	0.00000	0.000000	0.00000
29	0.000	+.1	+.41	+1.17	0.00000	0.000000	0.00000
30	0.000	+.1	+1136.92	+297.68	0.00000	0.000000	0.00000
31	0.000	+.1	+1.78	+.48	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 35 DATE :27 OCTOBER 1982 08:20 OAT= 42 BAROMETER= 30.301 WET BULB T
EMP= 39 DRY BULB TEMP= 42
WIND CONDITIONS :LIGHT 0 to 2 Kts NORTH Z/R= .75
SUMMARY:S-76 BLADES W/ 20 Deg SWEPT TIPS/ IGE

CONFIGURATION FILE : DATA2 S76[[[]WEKT/NoTail/*INACTIVE*
DATA FILE : TIP035:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.099996 in. = .258333 ft.
SOLIDITY : .0784325

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001007 +.62856(Ct)^1.5 +205.931(Ct)^3

STANDARD DEVIATION = 4.70392E-15
MEAN ERROR = 9.60000E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-4.76	+.62	0.00000	0.000000	0.00000
2	0.000	+0.0	+1132.61	+288.09	0.00000	0.000000	0.00000
3	0.000	+0.0	-2.15	+.29	0.00000	0.000000	0.00000
4	0.000	+0.0	-2.77	+.32	0.00000	0.000000	0.00000
5	.601	+.1	-2.01	+34.55	-.00039	.001421	.00100
6	.601	+2.0	+59.24	+38.99	.01138	.001604	.14205
7	.601	+4.0	+159.55	+57.29	.03063	.002355	.42710
8	.601	+5.0	+219.34	+71.82	.04214	.002954	.54944
9	.601	+5.9	+274.79	+87.78	.05278	.003610	.63025
10	.601	+6.5	+312.78	+100.23	.06006	.004121	.67026
11	.601	+7.0	+342.95	+111.12	.06591	.004573	.69436
12	.601	+7.2	+361.87	+117.27	.06953	.004825	.71308
13	.601	+7.5	+384.91	+125.97	.07395	.005176	.72768
14	.600	+8.0	+418.05	+139.98	.08049	.005771	.74252
15	.600	+8.2	+429.56	+144.97	.08273	.005978	.74691
16	.600	+8.5	+448.78	+153.61	.08642	.006334	.75268
17	.600	+8.8	+467.67	+162.10	.08998	.006678	.75843
18	.600	+5.0	+224.01	+73.14	.04308	.003012	.55712
19	.600	+5.5	+254.33	+81.21	.04891	.003344	.60702
20	.601	+4.5	+192.83	+65.10	.03704	.002681	.49893
21	.600	+3.0	+115.31	+48.32	.02218	.001990	.31143
22	.600	+9.0	+483.47	+170.44	.09309	.007027	.75846
23	.600	+9.5	+516.57	+186.31	.09951	.007685	.76650
24	.600	+10.0	+547.23	+202.51	.10538	.008350	.76873
25	.600	+9.7	+535.74	+195.37	.10323	.008061	.77210
26	.600	+9.0	+489.44	+172.81	.09434	.007133	.76237
27	.600	+8.5	+458.86	+156.46	.08833	.006449	.76388
28	.600	+7.8	+408.62	+135.45	.07862	.005580	.74125
29	.600	-.0	+4.21	+35.36	.00081	.001456	.00297
30	0.000	-.0	+2.77	+.32	0.00000	0.000000	0.00000
31	0.000	-.0	+.28	+.77	0.00000	0.000000	0.00000
32	0.000	-.0	+1137.53	+297.58	0.00000	0.000000	0.00000
33	0.000	-.0	+2.78	+.74	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 36 DATE :27 OCTOBER 1982 /09:12 OAT= 43 BAROMETER= 30.308 WET BULB TE
MP= 41 DRY BULB TEMP= 43
WIND CONDITIONS :LIGHT 0 to 2 kts/ NORTHZ/R= .75
SUMMARY:S-76 BLADES W/ 20 Deg SWEPT TIPS/ IGE

CONFIGURATION FILE : DATA2 S76[II]WEXT/NoTail/*INACTIVE*
DATA FILE : TIP036:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.099996 in. = .258333 ft.
SOLIDITY : .0704325

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001006 +.62999(Ct)^1.5 +230.502(Ct)^3

STANDARD DEVIATION = 4.89898E-15
MEAN ERROR = 1.00000E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-3.65	+1.35	0.00000	0.000000	0.00000
2	0.000	+0.0	+1132.88	+286.09	0.00000	0.000000	0.00000
3	0.000	+0.0	-1.88	+2.28	0.00000	0.000000	0.00000
4	0.000	+0.0	-.62	+.15	0.00000	0.000000	0.00000
5	.600	+.0	-2.63	+34.17	-.00051	.001409	-.00151
6	.599	+8.9	+462.96	+162.54	.08938	.006719	.74623
7	.599	+10.1	+541.72	+203.62	.10457	.008416	.75395
8	.599	+9.8	+526.48	+194.10	.10166	.008026	.75794
9	.599	+9.5	+513.12	+186.65	.09913	.007722	.75854
10	.599	+9.4	+496.89	+180.11	.09601	.007452	.74916
11	.599	+9.1	+480.04	+171.67	.09265	.007095	.74591
12	.599	+8.8	+466.31	+164.35	.09001	.006793	.74603
13	.599	+8.4	+441.49	+152.61	.08527	.006312	.74036
14	.599	+8.1	+423.57	+143.54	.08168	.005927	.73907
15	.599	+7.7	+399.29	+134.05	.07710	.005543	.72483
16	.599	+7.3	+374.96	+123.85	.07231	.005116	.71333
17	.599	+6.9	+347.58	+113.49	.06722	.004700	.69590
18	.599	+6.5	+327.52	+105.47	.06317	.004356	.68397
19	.599	+6.1	+295.53	+94.54	.05700	.003905	.65404
20	.600	+5.5	+256.93	+82.53	.04950	.003405	.60700
21	.600	+4.6	+197.93	+66.71	.03816	.002754	.50793
22	.599	+3.6	+142.84	+53.98	.02754	.002229	.38485
23	.600	+2.5	+92.49	+44.49	.01783	.001837	.24328
24	.599	+8.2	+419.46	+142.01	.08092	.005866	.73635
25	.599	+9.1	+485.18	+171.94	.09361	.007103	.75659
26	.599	+9.1	+482.26	+171.43	.09321	.007095	.75267
27	.599	+9.9	+530.14	+197.79	.10252	.008191	.75211
28	.599	+10.2	+554.75	+209.77	.10722	.008682	.75888
29	.599	+.1	+2.03	+34.77	.00039	.001435	.00101
30	0.000	+.1	+.62	+.15	0.00000	0.000000	0.00000
31	0.000	+.1	-1.28	+1.56	0.00000	0.000000	0.00000
32	0.000	+.1	+1135.38	+287.92	0.00000	0.000000	0.00000
33	0.000	+.1	+.61	+.54	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 37 DATE :27 OCTOBER 1982 /10:16 OAT= 48.5 BAROMETER= 30.31 WET BULB T
EMP= 44 DRY BULB TEMP= 48.5
WIND CONDITIONS :VARIED 0 to 3 kts NORTHZ/R= 1.2
SUMMARY:3-76 BLADES W/ 20 Deg SWEPT TIPS

CONFIGURATION FILE : DATA2 $76[[[]WEXT/NoTail/*INACTIVE=
DATA FILE : TIP037:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.099996 in. = .258333 ft.
SOLIDITY : .0704325

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000965 +.68926(Ct)^1.5 +223.351(Ct)^3

STANDARD DEVIATION = 9.61538E-17
MEAN ERROR = -1.92308E-17

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-2.07	+1.11	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.98	+286.54	0.00000	0.000000	0.00000
3	0.000	+0.0	-.19	+1.83	0.00000	0.000000	0.00000
4	0.000	+0.0	+.19	+.21	0.00000	0.000000	0.00000
5	.600	-.0	-3.29	+33.63	-.00063	.001388	-.00215
6	.600	+1.9	+57.71	+37.44	.01111	.001543	.14235
7	.599	+3.9	+150.62	+55.01	.02906	.002272	.40905
8	.599	+6.0	+260.73	+86.54	.05035	.003578	.59247
9	.599	+7.0	+319.98	+107.82	.06171	.004454	.64592
10	.599	+8.0	+387.52	+134.72	.07477	.005570	.68883
11	.599	+9.0	+454.17	+165.41	.08776	.006844	.71280
12	.599	+9.9	+520.43	+199.19	.10046	.008233	.72571
13	.599	+10.5	+545.88	+216.58	.10541	.008955	.71715
14	.599	+10.5	+549.01	+218.23	.10616	.009036	.71834
15	.599	+10.8	+523.58	+203.91	.10116	.008436	.71971
16	.598	+10.8	+522.06	+203.31	.10101	.008423	.71523
17	.599	+9.7	+505.70	+192.44	.09766	.007958	.71972
18	.599	+9.4	+498.15	+184.09	.09464	.007611	.71781
19	.599	+9.1	+468.54	+174.09	.09042	.007194	.70924
20	.599	+9.0	+461.17	+168.60	.08896	.006964	.71500
21	.599	+9.0	+460.53	+169.83	.08887	.007018	.70846
22	.599	+8.7	+442.42	+160.43	.08541	.006632	.70630
23	.599	+8.7	+441.35	+160.40	.08524	.006633	.70481
24	.599	+8.4	+428.10	+152.71	.08264	.006312	.70622
25	.600	+7.9	+395.64	+139.26	.07627	.005748	.68757
26	.599	+7.4	+366.10	+125.09	.07061	.005166	.68156
27	.599	+6.4	+294.04	+98.22	.05674	.004058	.62494
28	.599	+5.4	+234.35	+78.97	.04522	.003263	.55304
29	.599	+3.3	+124.31	+49.99	.02401	.002068	.33768
30	.599	+.2	+8.84	+34.02	.00171	.001405	.00940
31	0.000	+.2	-.19	+.21	0.00000	0.000000	0.00000
32	0.000	+.2	-.82	+1.41	0.00000	0.000000	0.00000
33	0.000	+.2	+1134.57	+288.01	0.00000	0.000000	0.00000
34	0.000	+.2	-.19	+.48	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 38 DATE :27 OCT 1982 OAT= 52 BAROMETER= 30.305 WET BULB TEMP= 45 DRY BULB TEMP= 51
WIND CONDITIONS :LIGHT GUSTS FROM NORTH 0-4 Z/R= 3
SUMMARY:S-76 BLADES W/ 20 Deg SWEPT TIPS

CONFIGURATION FILE : DATA2 S76[[[]WEKT/NoTail/*INACTIVE*
DATA FILE : TIP038:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.099996 in. = .258333 ft.
SOLIDITY : .0704325

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000987 +.68476(Ct)^1.5 +346.427(Ct)^3

STANDARD DEVIATION = 2.72383E-15
MEAN ERROR = 5.56000E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque .ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-1.05	+1.64	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.85	+285.80	0.00000	0.000000	0.00000
3	0.000	+0.0	+.08	+2.57	0.00000	0.000000	0.00000
4	0.000	+0.0	+.20	+.23	0.00000	0.000000	0.00000
5	.650	+.2	-3.35	+39.95	-.00055	.001402	.00172
6	.650	+.2	-2.63	+40.01	-.00043	.001406	.00120
7	.649	+2.0	+61.05	+44.22	.01004	.001557	.12125
8	.650	+4.0	+166.23	+64.10	.02728	.002253	.37540
9	.649	+5.1	+238.78	+82.66	.03921	.002908	.50115
10	.649	+6.1	+296.95	+100.94	.04885	.003556	.56983
11	.649	+6.1	+302.79	+102.23	.04988	.003606	.57968
12	.648	+7.1	+363.56	+126.62	.05991	.004447	.61885
13	.649	+8.0	+436.05	+155.54	.07168	.005479	.65781
14	.649	+8.0	+432.93	+155.96	.07122	.005494	.64922
15	.649	+8.0	+441.91	+157.49	.07279	.005555	.66345
16	.649	+8.6	+474.63	+175.60	.07810	.006187	.66198
17	.648	+9.0	+516.05	+197.19	.08507	.006960	.66893
18	.648	+9.5	+551.04	+217.88	.09099	.007704	.66860
19	.648	+9.5	+551.48	+217.88	.09108	.007707	.66936
20	.649	+9.3	+535.67	+207.94	.08815	.007327	.67029
21	.649	+9.0	+523.48	+201.12	.08611	.007085	.66937
22	.649	+7.5	+404.52	+143.74	.06650	.005060	.63603
23	.649	+7.1	+371.28	+129.14	.06105	.004547	.62253
24	.649	+8.5	+453.57	+165.60	.07464	.005835	.65579
25	.649	+8.1	+442.38	+159.65	.07267	.005618	.65462
26	.649	+7.3	+379.48	+133.29	.06237	.004691	.62313
27	.649	+7.3	+382.06	+134.52	.06286	.004739	.62406
28	.649	+3.1	+119.34	+54.58	.01961	.001921	.26839
29	.650	+.1	-3.48	+40.70	-.00057	.001431	.00179
30	0.000	+.1	-.20	+.23	0.00000	0.000000	0.00000
31	0.000	+.1	-1.05	+1.79	0.00000	0.000000	0.00000
32	0.000	+.1	+1134.31	+288.06	0.00000	0.000000	0.00000
33	0.000	+.1	-.95	+.44	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 39 DATE :27 OCT 1982 :13:07 OAT= 58.5 BAROMETER= 30.27 WET BULB TEMP= 47.5 DRY BULB TEMP= 58.5
WIND CONDITIONS :VARIED 0 to 4 Kts /NORTH R/R= 3
SUMMARY:3-76 BLADES W/ 20 Deg SWEPT TIPS

CONFIGURATION FILE : DATA2 376[[[]WENT/NoTail/*INACTIVE*
DATA FILE : TIP039:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.099996 in. = .258333 ft.
SOLIDITY : .0704325

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000969 +.68834(Ct)^1.5 +310.725(Ct)^3

STANDARD DEVIATION = 1.86161E-15
MEAN ERROR = 3.00000E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+.36	+1.31	0.00000	0.000000	0.00000
2	0.000	+0.0	+1135.07	+286.89	0.00000	0.000000	0.00000
3	0.000	+0.0	+.30	+1.49	0.00000	0.000000	0.00000
4	0.000	+0.0	+.31	+.20	0.00000	0.000000	0.00000
5	.601	-.0	-.08	+33.67	-.00002	.001384	.00001
6	.601	+2.0	+62.92	+38.14	.01207	.001567	.15881
7	.601	+3.8	+140.00	+52.98	.02691	.002181	.37997
8	.601	+5.0	+200.52	+69.34	.03855	.002855	.49764
9	.600	+5.9	+252.25	+85.43	.04855	.003521	.57818
10	.601	+7.1	+318.78	+108.76	.06125	.004475	.63575
11	.601	+7.9	+371.41	+131.73	.07131	.005416	.65985
12	.601	+8.9	+437.61	+164.24	.08414	.006762	.67731
13	.601	+10.0	+499.21	+198.14	.09588	.008149	.68373
14	.601	+10.0	+497.48	+197.36	.09555	.008117	.68287
15	.600	+10.0	+498.03	+198.14	.09593	.008173	.68226
16	.600	+9.7	+484.81	+189.85	.09328	.007822	.68351
17	.600	+9.5	+469.98	+181.92	.09048	.007500	.68101
18	.601	+9.2	+457.49	+175.02	.08796	.007206	.67940
19	.601	+8.9	+441.74	+166.67	.08490	.006859	.67678
20	.600	+8.7	+424.81	+157.85	.08178	.006507	.67448
21	.600	+8.4	+412.28	+150.70	.07941	.006216	.67565
22	.601	+8.2	+396.51	+141.87	.07619	.005837	.67606
23	.601	+7.9	+376.32	+134.67	.07233	.005543	.65864
24	.600	+7.5	+359.41	+126.38	.06917	.005208	.65547
25	.601	+6.4	+284.27	+96.54	.05458	.003969	.64289
26	.601	+5.4	+230.25	+78.62	.04428	.003232	.53964
27	.601	+8.9	+439.09	+165.02	.08446	.006792	.67744
28	.601	+9.2	+456.23	+173.07	.08766	.007121	.68401
29	.601	+.0	+2.26	+34.51	.00043	.001419	.00120
30	0.000	+.0	-.31	+.20	0.00000	0.000000	0.00000
31	0.000	+.0	+.36	+1.61	0.00000	0.000000	0.00000
32	0.000	+.0	+1134.45	+288.33	0.00000	0.000000	0.00000
33	0.000	+.0	-.31	+.08	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 40 DATE :27 OCT 1982 13:54 OAT= 57.5 BAROMETER= 30.252 WET BULB TEMP = 47.5 DRY BULB TEMP= 57.5
WIND CONDITIONS :VARIED 0 to 4 Kts /NORTH R= 3
SUMMARY:S-76 BLADES W/ 20 Deg SWEPT TIPS

CONFIGURATION FILE : DATA2 STATIONARY/NoTail/*INACTIVE*
DATA FILE : TIP040:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.099996 in. = .258333 ft.
SOLIDITY : .0704325

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000984 +.72727(Ct)^1.5 +208.822(Ct)^3

STANDARD DEVIATION = 6.72973E-16
MEAN ERROR = 1.43478E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+1.31	+1.95	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.77	+287.77	0.00000	0.000000	0.00000
3	0.000	+0.0	+.01	+.60	0.00000	0.000000	0.00000
4	0.000	+0.0	-.00	+.15	0.00000	0.000000	0.00000
5	.551	-.0	-1.05	+28.22	-.00024	.001383	.00051
6	.550	+8.0	+310.94	+109.42	.07139	.005380	.66539
7	.550	+9.2	+370.09	+139.14	.08504	.006846	.67973
8	.551	+10.0	+411.02	+162.95	0.00000	0.000000	0.00000
9	.551	+10.2	+426.39	+167.78	.09740	.008207	.69506
10	.550	+10.2	+430.40	+170.93	.09856	.008382	.69276
11	.551	+10.5	+438.42	+177.42	0.00000	0.000000	0.00000
12	.551	+10.5	+436.37	+175.38	0.00000	0.000000	0.00000
13	.549	+10.0	+414.62	+162.32	.09531	.007990	.69110
14	.550	+9.7	+407.96	+156.82	.09374	.007716	.69800
15	.549	+9.5	+394.61	+150.58	.09077	.007417	.69194
16	.550	+9.2	+376.88	+143.29	.08643	.007037	.67770
17	.550	+9.0	+371.08	+139.56	.08525	.006866	.68037
18	.550	+8.7	+352.87	+129.36	.08089	.006349	.67992
19	.550	+8.5	+338.58	+123.44	.07762	.006060	.66970
20	.550	+8.2	+319.82	+116.36	.07347	.005724	.65291
21	.550	+7.7	+300.87	+107.38	.06904	.005276	.64520
22	.550	+7.2	+280.82	+97.56	.06446	.004792	.64080
23	.550	+7.4	+280.49	+98.95	.06445	.004868	.63870
24	.550	+6.9	+261.04	+91.20	.05986	.004478	.61373
25	.550	+6.4	+238.37	+81.26	.05465	.003989	.60094
26	.550	+5.4	+191.59	+66.01	.04397	.003244	.53334
27	.550	+4.8	+126.64	+47.88	.02904	.002351	.39497
28	.551	+2.9	+87.81	+39.93	.02010	.001957	.27329
29	.550	+1.9	+55.32	+34.22	.01268	.001680	.15955
30	.550	-.1	+2.12	+29.30	.00049	.001438	.00148
31	0.000	-.1	+.00	+.15	0.00000	0.000000	0.00000
32	0.000	-.1	+1.31	+1.95	0.00000	0.000000	0.00000
33	0.000	-.1	+1134.77	+287.92	0.00000	0.000000	0.00000
34	0.000	-.1	+.00	+.48	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 41 DATE :27 OCTOBER 1982 / 17:32 OAT= 54 BAROMETER= 30.235 WET BULB T
EMP= 48 DRY BULB TEMP= 54
WIND CONDITIONS :VERY LIGHT 0 to 2 Kts Z/R= 0
SUMMARY LIBRATION RUN

CONFIGURATION FILE : DATA5 H34CIII/NoTail/**INACTIVE**
DATA FILE : TIP041:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 54.24996 in. = 4.52083 ft.
  CHORD : 4.250004 in. = .354167 ft.
  SOLIDITY : .099747

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001118 +.84903(Ct)^1.5 +97.259(Ct)^3

STANDARD DEVIATION = 3.07692E-15
MEAN ERROR = 6.15385E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+.23	+1.79	0.00000	0.000000	0.00000
2	0.000	+0.0	+1133.52	+287.49	0.00000	0.000000	0.00000
3	0.000	+0.0	-1.24	+.89	0.00000	0.000000	0.00000
4	0.000	+0.0	+.00	+.14	0.00000	0.000000	0.00000
5	.601	+0.0	+.37	+34.63	.00005	.001111	.00000
6	.600	+2.0	+53.05	+39.70	.00770	.001275	.11841
7	.600	+4.0	+154.24	+62.70	.02239	.002013	.37166
8	.601	+5.0	+206.90	+79.09	.02996	.002533	.45717
9	.601	+6.0	+269.78	+101.12	.03913	.003245	.53284
10	.601	+7.0	+332.82	+127.27	.04828	.004084	.58013
11	.601	+7.5	+361.57	+140.12	.05243	.004494	.59652
12	.601	+8.0	+395.44	+155.49	.05739	.004991	.61510
13	.601	+8.5	+425.98	+171.01	.06183	.005491	.62537
14	.600	+9.0	+464.36	+190.04	.06743	.006104	.64058
15	.601	+9.3	+479.43	+198.90	.06954	.006382	.64175
16	.601	+9.0	+462.09	+189.41	.06706	.006080	.63782
17	.601	+8.8	+453.92	+183.74	.06575	.005897	.63955
18	.601	+8.5	+432.07	+173.62	.06264	.005568	.62883
19	.601	+8.3	+416.38	+165.49	.06043	.005312	.62445
20	.600	+8.0	+405.40	+159.48	.05890	.005126	.62286
21	.600	+7.8	+387.63	+151.65	.05627	.004870	.61220
22	.601	+7.3	+355.54	+136.88	.05148	.004383	.59517
23	.600	+7.0	+335.21	+128.32	.04870	.004124	.58201
24	.601	+6.5	+307.08	+116.52	.04452	.003737	.56140
25	.601	+5.8	+261.82	+98.33	.03798	.003155	.52386
26	.601	+5.3	+232.77	+88.06	.03373	.002823	.49013
27	.601	+4.8	+207.22	+79.21	.03004	.002540	.45775
28	.601	+3.5	+136.97	+58.97	.01984	.001891	.33007
29	.601	+3.0	+111.00	+52.61	.01608	.001686	.27012
30	.602	+.1	+2.28	+36.01	.00033	.001152	.00116
31	0.000	+.1	-.00	+.14	0.00000	0.000000	0.00000
32	0.000	+.1	+.10	+2.09	0.00000	0.000000	0.00000
33	0.000	+.1	+1134.14	+287.82	0.00000	0.000000	0.00000
34	0.000	+.1	-.01	+.58	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 42 DATE :27 OCTOBER 1982 17:56 OAT= 43.5 BAROMETER= 30.27 WET BULB TEMP= 41.5 DRY BULB TEMP= 43
WIND CONDITIONS :ZERO-1 / VARIED Z/R= .75
SUMMARY:S-79 BLADES WITH 20/35deg SWEEP AND 20 deg ANHEDRAL

CONFIGURATION FILE : DATA1 S79(III)WKT-NoTail-#INACTIVE-
DATA FILE : TIP042:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.22396 in. = 4.68533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0819251

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001054 +.64603(Ct)^1.5 +171.657(Ct)^3

STANDARD DEVIATION = 4.70302E-15
MEAN ERROR = -9.60000E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-1.11	+1.35	0.00000	0.000000	0.00000
2	0.000	+0.0	+1133.17	+287.44	0.00000	0.000000	0.00000
3	0.000	+0.0	-1.59	+.93	0.00000	0.000000	0.00000
4	0.000	+0.0	-.57	+.30	0.00000	0.000000	0.00000
5	.600	+0.0	+1.59	+38.42	.00025	.001357	.00058
6	.601	+2.0	+72.15	+43.04	.01191	.001517	.17385
7	.600	+3.1	+124.08	+51.57	.02052	.001820	.32606
8	.601	+4.0	+170.76	+61.41	.02820	.002164	.44166
9	.600	+5.0	+227.95	+76.21	.03773	.002692	.54957
10	.600	+6.0	+290.19	+94.91	.04809	.003357	.63425
11	.600	+7.0	+359.25	+118.54	.05943	.004185	.69888
12	.601	+8.1	+430.49	+147.92	.07105	.005211	.73380
13	.600	+9.0	+499.74	+178.69	.08265	.006307	.76056
14	.599	+10.1	+576.07	+218.16	.09554	.007722	.77206
15	.600	+10.6	+597.49	+230.77	.09888	.008151	.77015
16	.480	+10.6	+604.41	+233.14	0.00000	0.000000	0.00000
17	.600	+10.5	+599.23	+231.10	.09910	.008157	.77216
18	.600	+10.4	+593.05	+227.02	.09817	.008020	.77426
19	.600	+10.1	+573.64	+216.96	.09499	.007668	.77085
20	.600	+9.8	+549.72	+204.38	.09109	.007227	.76798
21	.600	+9.6	+540.41	+198.98	.08952	.007035	.76867
22	.600	+9.3	+517.16	+187.91	.08549	.006629	.76122
23	.600	+9.1	+501.47	+180.31	.08302	.006371	.75802
24	.600	+9.0	+499.48	+178.48	.08253	.006295	.76038
25	.601	+8.7	+478.20	+169.14	.07898	.005962	.75158
26	.600	+8.4	+459.54	+160.56	.07605	.005671	.74663
27	.600	+8.4	+452.34	+157.59	.07494	.005572	.74332
28	.600	+8.0	+431.65	+148.85	.07138	.005254	.73286
29	.600	+7.7	+412.50	+140.30	.06827	.004956	.72671
30	.600	+7.3	+385.09	+128.65	.06372	.004543	.71473
31	0.000	+7.3	+.57	+.30	0.00000	0.000000	0.00000
32	0.000	+7.3	-.48	+1.88	0.00000	0.000000	0.00000
33	0.000	+7.3	+1135.07	+287.62	0.00000	0.000000	0.00000
34	0.000	+7.3	+.06	+.66	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 43 DATE :29 OCTOBER 1982 - 09:43 OAT= 47 BAROMETER= 30.258 WET BULB T
EMP= 43.5 DRY BULB TEMP= 47
WIND CONDITIONS :LIGHT 0 to 2 Kts Z/R= 1.2
SUMMARY:6=70 BLADES W. 20 Deg-35 Deg DOUBLE SWEEP & 20 Deg ANHEDRAL

CONFIGURATION FILE : DATA1 $70C[[]WEXT-NoTail/*INACTIVE*
DATA FILE : TIP043:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.22396 in. = 4.68533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0819291

TAIL ROTOR NOT PRESENT

PROCESSING DATE :17 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001047 +.67385(Ct)^1.5 +173.270(Ct)^3

STANDARD DEVIATION = 1.76363E-15
MEAN ERROR = 3.60000E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-1.48	+1.44	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.77	+288.37	0.00000	0.000000	0.00000
3	0.000	+0.0	+.00	+0.00	0.00000	0.000000	0.00000
4	0.000	+0.0	+.01	+0.00	0.00000	0.000000	0.00000
5	.601	-.0	-11.83	+38.62	-.00195	.001360	.01279
6	.601	+2.1	+70.86	+42.64	.01170	.001503	.17007
7	.601	+3.3	+114.61	+50.02	.01893	.001763	.29816
8	.600	+4.2	+164.53	+60.62	.02720	.002139	.42345
9	.602	+5.1	+219.70	+74.69	.03617	.002625	.52923
10	.601	+6.1	+279.20	+92.84	.04605	.003268	.61042
11	.601	+7.2	+345.57	+116.94	.05698	.004115	.66726
12	.601	+8.1	+412.26	+143.68	.06809	.005065	.70829
13	.601	+9.2	+485.62	+176.53	.08010	.006215	.73647
14X	.600	+10.3	+562.49	+214.61	.09302	.007575	.75617
15	.600	+10.1	+547.11	+208.97	.09052	.007380	.74514
16	.600	+9.8	+525.46	+197.66	.08693	.006979	.74145
17	.601	+9.4	+498.68	+185.57	.08238	.006540	.72948
18	.600	+9.0	+472.62	+172.84	.07812	.006098	.72295
19	.601	+8.7	+454.44	+162.91	.07508	.005742	.72290
20	.601	+8.5	+432.26	+152.32	.07134	.005366	.71703
21	.601	+8.8	+404.09	+140.85	.06658	.004925	.70431
22	.601	+8.8	+454.21	+163.48	.07487	.005752	.71914
23	.602	+7.6	+377.24	+129.18	.06212	.004548	.68851
24	.602	+6.6	+311.48	+104.58	.05130	.003676	.63814
25	.601	+5.6	+246.86	+83.12	.04076	.002929	.56721
26	.601	+4.7	+193.88	+68.30	.03197	.002403	.48013
27	.601	+3.6	+141.22	+56.14	.02332	.001979	.36337
28	.601	+2.7	+96.52	+47.50	.01591	.001671	.24246
29	.601	+.2	+14.00	+38.92	.00231	.001370	.01635
30	0.000	+.2	-.01	+0.00	0.00000	0.000000	0.00000
31	0.000	+.2	-1.48	+1.44	0.00000	0.000000	0.00000
32	0.000	+.2	+1133.49	+287.95	0.00000	0.000000	0.00000
33	0.000	+.2	-.01	+.39	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 44 DATE :20 OCTOBER 1982 - 10:47 OAT= 54.5 BAROMETER= 30.249 WET BULB TEMP= 48.5 DRY BULB TEMP= 54.5
WIND CONDITIONS :LIGHT 0 to 2 Kts R/R= 3
SUMMARY:S=70 BLADES W=-20 Deg-35 Deg DOUBLE SWEEP & 20 Deg ANHEDRAL

CONFIGURATION FILE : DATA1 S70(III)WEXT/NoTail/*INACTIVE*'
DATA FILE : TIP044:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.22396 in. = 4.68533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0815251

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001049 +.68304(Ct)^1.5 +176.487(Ct)^3

STANDARD DEVIATION = 7.69231E-16
MEAN ERROR = -1.53846E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+.43	+1.47	0.00000	0.000000	0.00000
2	0.000	+0.0	+1135.74	+286.15	0.00000	0.000000	0.00000
3	0.000	+0.0	+.98	+2.22	0.00000	0.000000	0.00000
4	0.000	+0.0	+.62	+.27	0.00000	0.000000	0.00000
5	.598	+.0	-4.46	+37.95	-.00074	.001349	.00303
6	.598	+1.8	+64.23	+40.93	.01070	.001455	.15359
7	.598	+3.8	+157.17	+58.82	.02617	.002091	.40891
8	.599	+5.8	+262.87	+88.64	.04368	.003144	.58633
9	.598	+6.9	+326.17	+111.10	.05431	.003948	.64721
10	.598	+7.8	+392.88	+137.91	.06545	.004903	.68941
11	.598	+8.8	+462.81	+167.61	.07717	.005965	.72563
12	.598	+9.8	+528.97	+201.51	.08815	.007167	.73726
13	.599	+10.3	+598.06	+219.82	.09278	.007800	.73149
14	.598	+10.1	+549.95	+210.72	.09165	.007495	.74737
15	.598	+9.8	+529.39	+201.87	.08821	.007179	.73678
16	.598	+8.3	+422.48	+158.85	.07034	.005361	.70265
17	.598	+9.6	+506.41	+191.38	.08438	.006796	.72706
18	.598	+9.3	+488.03	+181.97	.08121	.006448	.72456
19	.598	+9.0	+471.73	+174.72	.07854	.006209	.71577
20	.599	+8.8	+462.83	+168.91	.07675	.005964	.71982
21	.599	+8.5	+439.46	+158.68	.07308	.005623	.70817
22	.598	+8.3	+428.62	+152.35	.07140	.005417	.71113
23	.599	+7.3	+363.62	+125.09	.06045	.004439	.67609
24	.597	+6.3	+295.62	+100.50	.04947	.003590	.61889
25	.599	+5.3	+238.92	+81.40	.03965	.002883	.55283
26	.599	+4.3	+185.05	+66.06	.03077	.002344	.46481
27	.599	+3.3	+138.81	+53.33	.02160	.001891	.33892
28	.599	+2.3	+83.72	+44.74	.01392	.001588	.20887
29	.598	+0.8	+455.98	+165.98	.07601	.005907	.71633
30	.599	-.0	+.16	+38.67	.00003	.001372	.00002
31	0.000	-.0	-.62	+.27	0.00000	0.000000	0.00000
32	0.000	-.0	+.44	+1.53	0.00000	0.000000	0.00000
33	0.000	-.0	+1134.65	+288.19	0.00000	0.000000	0.00000
34	0.000	-.0	-.88	+.36	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 45 DATE :20 OCTOBER 192 / 11:46 OAT= 60 BAROMETER= 30.245 WET BULB TE
MP= 51 DRY BULB TEMP= 60
WIND CONDITIONS :LIGHT 0 to 2 Kts Z/R= 3
SUMMARY:S-76 BLADES W-20 Deg-35 Deg DOUBLE SWEEP & 20 Deg ANHEDRAL

CONFIGURATION FILE : DATA1 S76[[[]WEXT/NoTail/*INACTIVE*
DATA FILE : TIP045:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 56.22396 in. = 4.68533 ft.
  CHORD : 3.6 in. = .3 ft.
  SOLIDITY : .0815251

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001069 +.68585(Ct)^1.5 +174.214(Ct)^3

STANDARD DEVIATION = 1.59861E-15
MEAN ERROR = -3.33333E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+1.34	+1.86	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.80	+287.44	0.00000	0.000000	0.00000
3	0.000	+0.0	+.04	+.93	0.00000	0.000000	0.00000
4	0.000	+0.0	+.01	+.21	0.00000	0.000000	0.00000
5	.650	+.1	-9.46	+45.85	-.00133	.001380	.00712
6	.650	+2.0	+66.78	+48.28	.00941	.001452	.12690
7	.650	+3.9	+173.88	+67.52	.02455	.002034	.39170
8	.650	+5.1	+242.17	+84.38	.03419	.002542	.50196
9	.650	+6.1	+314.84	+107.01	.04442	.003222	.58657
10	.650	+7.1	+386.40	+132.09	.05453	.003979	.64620
11	.649	+8.0	+457.66	+160.57	.06476	.004858	.68613
12	.649	+9.0	+538.37	+196.28	.07616	.005924	.71632
13	.649	+9.6	+596.97	+225.72	.08450	.006819	.72728
14	.649	+10.0	+632.16	+244.38	.08955	.007388	.73224
15	.649	+9.3	+575.15	+213.74	.08126	.006445	.72559
16	.649	+8.7	+519.68	+186.86	.07346	.005638	.71308
17	.649	+8.5	+492.22	+177.82	.06958	.005365	.69869
18	.650	+8.2	+475.63	+169.42	.06717	.005106	.68824
19	.650	+8.0	+462.65	+163.63	.06533	.004913	.68611
20	.649	+7.7	+437.35	+151.78	.06182	.004579	.67776
21	.650	+7.4	+416.84	+144.25	.05886	.004347	.66320
22	.650	+7.2	+399.05	+137.49	.05633	.004143	.65163
23	.650	+7.0	+384.47	+132.00	.05425	.003975	.64172
24	.649	+6.4	+340.80	+117.12	.04817	.003533	.60414
25	.650	+5.5	+270.58	+94.76	.03822	.002857	.52806
26	.649	+4.4	+203.89	+76.61	.02883	.002312	.42744
27	.650	+3.0	+119.78	+57.88	.01689	.001742	.25443
28	.650	+1.0	+37.45	+46.75	.00528	.001408	.05509
29	0.000	+1.0	-.01	+.21	0.00000	0.000000	0.00000
30	0.000	+1.0	+1.34	+2.01	0.00000	0.000000	0.00000
31	0.000	+1.0	+1134.12	+287.71	0.00000	0.000000	0.00000
32	0.000	+1.0	-.01	+.63	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 46 DATE :20 OCTOBER 1982 / 14:31 OAT= 62.5 BAROMETER= 30.235 WET BULB TEMP= 51.5 DRY BULB TEMP= 62.5
WIND CONDITIONS :LIGHT 0 TO 2 Kts Z/R= 3
SUMMARY:3-70 BLADES W/ 20 Deg- 35 Deg DOUBLE SWEEP & 20 Deg ANHEDRAL

CONFIGURATION FILE : DATA1 $70(III)wEXT/NoTail/*INACTIVE*
DATA FILE : TIP046:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.22396 in. = 4.68533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0815251

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE*********

BEST CURVE FIT EQUATION: Cq= +.0001050 +.69847(Ct)^1.5 +160.783(Ct)^3

STANDARD DEVIATION = 3.46154E-15
MEAN ERROR = 6.92308E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+2.34	+1.88	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.44	+286.86	0.00000	0.000000	0.00000
3	0.000	+0.0	-.32	+1.52	0.00000	0.000000	0.00000
4	0.000	+0.0	+.19	+.08	0.00000	0.000000	0.00000
5	.550	-.2	-3.76	+32.99	-.00074	.001383	.00293
6	.551	+1.8	+54.36	+35.18	.01070	.001478	.15126
7	.550	+2.8	+91.58	+41.81	.01807	.001762	.27829
8	.550	+3.8	+136.36	+51.29	.02689	.002158	.41240
9	.550	+4.8	+177.38	+61.73	.03506	.002604	.50898
10	.550	+5.8	+228.31	+77.12	.04513	.003254	.59495
11	.550	+6.8	+271.42	+93.20	.05362	.003929	.63789
12	.550	+7.9	+331.96	+117.29	.06552	.004941	.68532
13	.550	+8.9	+386.20	+141.59	.07615	.005959	.71202
14	.550	+8.9	+390.74	+142.94	.07713	.006022	.71817
15	.550	+9.9	+445.42	+171.08	.08809	.007222	.73098
16	.550	+11.3	+521.41	+213.32	.10313	.009006	.74252
17	.550	+11.8	+504.96	+204.02	.09968	.008596	.73920
18	.549	+11.8	+498.55	+203.33	.09873	.008594	.72879
19	.550	+10.8	+489.94	+195.26	.09672	.008227	.73814
20	.551	+10.5	+475.14	+189.85	.09336	.007929	.72643
21	.551	+10.5	+478.56	+189.20	.09421	.007950	.73440
22	.550	+10.3	+466.40	+181.52	.09209	.007650	.73758
23	.550	+9.8	+438.84	+168.17	.08673	.007094	.72697
24	.550	+9.5	+426.16	+160.85	.08414	.006778	.72696
25	.551	+9.3	+413.64	+153.68	.08131	.006448	.72601
26	.550	+9.0	+397.76	+146.57	.07852	.006175	.71933
27	.550	+8.8	+381.96	+140.36	.07541	.005914	.70690
28	.550	+8.5	+365.76	+133.91	.07211	.005634	.69381
29	.550	+7.2	+302.33	+105.02	.05960	.004419	.66482
30	.550	+6.2	+249.45	+85.64	.04918	.003603	.61102
31	0.000	+6.2	-.19	+.08	0.00000	0.000000	0.00000
32	0.000	+6.2	+2.34	+2.18	0.00000	0.000000	0.00000
33	0.000	+6.2	+1134.69	+288.09	0.00000	0.000000	0.00000
34	0.000	+6.2	-.07	+.17	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 47 DATE :27 OCTOBER 1982 / 15:52 OAT= 61 BAROMETER= 30.162 WET BULB T
EMP= 56 DRY BULB TEMP= 61
WIND CONDITIONS :GUSTY / 0 to 4 Kts/ SOUTH Z/R= 3
SUMMARY:S-76 BLADES W/ 20 Deg- 35 Deg DOUBLE SWEEP & 20 Deg ANHEDRAL TIPS

CONFIGURATION FILE : DATA1 S76[[[]wEXT/NoTail/*INACTIVE*
DATA FILE : TIP047:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 56.22396 in. = 4.68533 ft.
  CHORD : 3.6 in. = .3 ft.
  SOLIDITY : .0815291

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001042 +.66902(Ct)^1.5 +206.670(Ct)^3

STANDARD DEVIATION = 0.00000E+00
MEAN ERROR = 0.00000E+00

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+2.97	+1.65	0.00000	0.000000	0.00000
2	0.000	+0.0	+1135.07	+287.59	0.00000	0.000000	0.00000
3	0.000	+0.0	+.38	+.78	0.00000	0.000000	0.00000
4	0.000	+0.0	-.06	+.42	0.00000	0.000000	0.00000
5	0.000	+0.0	-.31	+0.00	0.00000	0.000000	0.00000
6	.600	+.2	+8.30	+38.22	.00138	.001355	.00762
7	.600	+2.1	+60.94	+40.35	.01012	.001430	.14375
8	.599	+3.9	+150.68	+57.34	.02514	.002042	.39417
9	.600	+5.9	+262.11	+87.48	.04359	.003105	.59177
10	.599	+6.9	+321.87	+108.01	.05361	.003839	.65268
11	.600	+7.4	+353.19	+121.13	.05875	.004300	.66855
12	.599	+7.9	+389.72	+135.12	.06488	.004801	.69498
13	.600	+8.9	+453.52	+164.45	.07543	.005838	.71650
14	.599	+9.9	+521.06	+198.79	.08677	.007066	.73038
15	.599	+10.4	+555.13	+216.65	.09241	.007698	.73681
16	.599	+10.4	+550.47	+214.82	.09175	.007642	.73422
17	.600	+10.2	+538.50	+207.65	.08957	.007371	.73417
18	.599	+10.2	+533.15	+206.03	.08882	.007325	.72954
19	.600	+9.6	+507.50	+190.30	.08431	.006748	.73253
20	.599	+9.1	+474.41	+174.18	.07893	.006185	.72384
21	.599	+8.6	+439.85	+157.51	.07318	.005593	.71456
22	.600	+8.4	+426.44	+151.45	.07088	.005373	.70913
23	.599	+8.1	+402.27	+141.57	.06692	.005027	.69534
24	.599	+7.6	+372.68	+128.28	.06206	.004559	.68466
25	.600	+7.1	+345.41	+117.59	.05739	.004170	.66568
26	.601	+6.4	+296.44	+99.64	.04908	.003521	.62353
27	.599	+6.4	+297.98	+99.64	.04961	.003541	.62994
28	.599	+9.9	+521.91	+199.87	.08684	.007098	.72789
29	.599	+9.4	+496.96	+185.40	.08275	.006589	.72939
30	.600	+8.9	+455.66	+169.95	.07565	.005880	.71439
31	0.000	+8.9	+.31	+0.00	0.00000	0.000000	0.00000
32	0.000	+8.9	+2.34	+1.95	0.00000	0.000000	0.00000
33	0.000	+8.9	+1135.46	+288.25	0.00000	0.000000	0.00000
34	0.000	+8.9	-.32	+.12	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 48 DATE :28 OCTOBER 1982 - 16:57 OAT= 59.75 BAROMETER= 30.16 WET BULB TEMP= 52 DRY BULB TEMP= 59.75
WIND CONDITIONS :LIGHT / 0 to 2 Kts/ SOUTH Z/R= 3
SUMMARY:3-76 BLADES W- 20 Deg- 35 Deg DOUBLE SWEEP & 20 Deg ANHEDRAL TIPS

CONFIGURATION FILE : DATA1 S70[1]WEXT/NoTail/+INACTIVE+
DATA FILE : TIP848:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.22396 in. = 4.68533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0815251

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001074 +.66369(Ct)^1.5 +233.453(Ct)^3

STANDARD DEVIATION = 3.74938E-15
MEAN ERROR = -8.18182E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+2.85	+1.68	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.46	+287.98	0.00000	0.000000	0.00000
3	0.000	+0.0	-.30	+.39	0.00000	0.000000	0.00000
4	0.000	+0.0	-.31	+.12	0.00000	0.000000	0.00000
5	.551	+.0	-4.12	+32.49	-.00081	.001367	.00342
6	.550	+2.0	+58.34	+35.86	.01152	.001511	.16521
7	.551	+4.0	+132.37	+49.81	.02609	.002095	.40605
8	.550	+5.0	+176.18	+61.03	.03482	.002574	.50954
9	.550	+6.0	+225.89	+76.51	.04462	.003226	.58995
10	.550	+7.0	+275.87	+93.97	.05456	.003967	.64868
11	.549	+8.0	+325.36	+114.11	.06441	.004821	.68459
12	.550	+9.0	+381.81	+139.79	.07555	.005904	.71016
13	.550	+10.0	+436.27	+166.13	0.00000	0.000000	0.00000
14	.550	+10.5	+461.40	+180.36	.09116	.007606	.73068
15	.550	+10.0	+431.55	+165.29	.08532	.006975	.72139
16	.549	+9.5	+404.46	+151.85	.08011	.006419	.71312
17	.550	+8.5	+351.84	+126.08	.06948	.005314	.69583
18	.550	+7.4	+299.50	+104.18	.05921	.004396	.66180
19	.550	+6.5	+252.78	+85.87	.04992	.003620	.62218
20	.550	+5.5	+204.15	+69.79	.04032	.002942	.55566
21	.550	+4.5	+159.19	+57.37	.03140	.002415	.46515
22	.550	+3.5	+113.36	+46.96	.02236	.001977	.34151
23	.550	+.1	+11.70	+33.12	.00231	.001399	.01607
24	.550	+9.7	+416.21	+158.96	.08230	.006709	.71053
25	.550	+9.5	+404.97	+152.99	.08013	.006461	.70980
26	.549	+9.5	+401.08	+151.49	.07943	.006403	.70581
27	.550	+10.0	+429.51	+165.59	.08497	.006991	.71519
28	0.000	+10.0	+.31	+.12	0.00000	0.000000	0.00000
29	0.000	+10.0	+2.34	+1.98	0.00000	0.000000	0.00000
30	0.000	+10.0	+1134.59	+288.22	0.00000	0.000000	0.00000
31	0.000	+10.0	+.32	+0.00	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 49 DATE :29 OCTOBER 1982 / 00:44 OAT= 47 BAROMETER= 30.205 WET BULB T
EMP= 42.5 DRY BULB TEMP= 47
WIND CONDITIONS :ZERO Z/R= 3
SUMMARY:8-70 BLADES W/ 20-35 Deg SWEEP & 20 Deg ANHEDRAL ****** DOORS OPEN *****

CONFIGURATION FILE : DATA1 $70[[[]wEXT/NoTail/*INACTIVE+
DATA FILE : TIP049:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 56.22396 in. = 4.68533 ft.
  CHORD : 3.6 in. = .3 ft.
  SOLIDITY : .0815251

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001068 +.63648(Ct)^1.5 +173.309(Ct)^3

STANDARD DEVIATION = 1.61923E-14
MEAN ERROR = 2.03846E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-2.28	+1.56	0.00000	0.000000	0.00000
2	0.000	+0.0	+1133.92	+298.37	0.00000	0.000000	0.00000
3	0.000	+0.0	-.94	+0.00	0.00000	0.000000	0.00000
4	0.000	+0.0	-.94	+.54	0.00000	0.000000	0.00000
5	.600	+.6	-6.00	+39.06	-.00100	.001383	.00458
6	.600	+1.6	+68.85	+42.15	.01143	.001493	.16515
7	.600	+3.7	+175.63	+63.12	.02914	.002235	.44929
8	.599	+4.6	+225.22	+75.18	.03742	.002666	.54817
9	.599	+5.5	+277.57	+90.78	.04613	.003220	.62118
10	.600	+6.6	+340.06	+111.81	.05642	.003960	.68337
11	.600	+7.7	+424.40	+144.76	.07043	.005127	.73601
12	.600	+8.7	+494.69	+177.52	.08213	.006290	.75547
13	.600	+9.4	+543.27	+200.83	.09018	.007115	.76848
14	.600	+10.4	+628.86	+246.07	.10420	.008702	.78036
15	.599	+10.1	+600.72	+238.71	.09977	.008178	.77799
16	.599	+9.9	+587.71	+224.08	.09765	.007946	.77529
17	.599	+9.6	+565.94	+211.66	.09412	.007513	.77599
18	.600	+9.4	+551.55	+203.14	.09142	.007186	.77659
19	.600	+8.9	+522.12	+187.99	.08664	.006658	.77333
20	.600	+8.6	+502.99	+178.99	.08335	.006330	.76747
21	.600	+8.3	+485.01	+171.76	.08037	.006075	.75728
22	.600	+7.9	+444.44	+152.68	.07374	.005407	.74776
23	.600	+7.8	+383.79	+127.54	.06368	.004516	.71834
24	.599	+5.9	+314.96	+102.84	.05234	.003648	.66280
25	.600	+4.9	+251.39	+83.48	.04163	.002948	.58176
26	.600	+3.9	+193.72	+67.77	.03214	.002400	.48471
27	.600	+3.0	+144.90	+56.37	.02401	.001994	.37674
28	.600	+.9	+57.87	+41.67	.00959	.001474	.12864
29	.599	+8.3	+471.10	+165.25	.07826	.005861	.75454
30	.600	+7.1	+396.05	+131.41	.06565	.004649	.73053
31	0.000	+7.1	+.94	+.54	0.00000	0.000000	0.00000
32	0.000	+7.1	-1.16	+1.71	0.00000	0.000000	0.00000
33	0.000	+7.1	+1135.94	+287.68	0.00000	0.000000	0.00000
34	0.000	+7.1	+.94	+.63	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 50 DATE :29 OCTOBER 1982 / 11:30 OAT= 61.5 BAROMETER= 30.182 WET BULB TEMP= 52 DRY BULB TEMP= 61.5
WIND CONDITIONS :ZERO-2 SOUTH Z/R= 3
SUMMARY:H-34 CALIBRATION RUN

CONFIGURATION FILE : DATA5 H34[III/NoTail/**INACTIVE**
DATA FILE : TIP050:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 54.24996 in. = 4.52083 ft.
CHORD : 4.250004 in. = .354167 ft.
SOLIDITY : .099747

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001134 +.84139(Ct)^1.5 +98.450(Ct)^3

STANDARD DEVIATION = 2.74343E-15
MEAN ERROR = 5.60000E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+.40	+1.50	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.46	+287.89	0.00000	0.000000	0.00000
3	0.000	+0.0	-.30	+.48	0.00000	0.000000	0.00000
4	0.000	+0.0	-.30	+.15	0.00000	0.000000	0.00000
5	.601	-.0	+7.48	+35.18	.00109	.001131	.00708
6	.601	+2.0	+69.09	+42.96	.01003	.001380	.16263
7	.601	+4.0	+173.28	+68.54	.02519	.002204	.40512
8	.601	+5.4	+250.08	+94.08	.03635	.003025	.51166
9	.600	+6.1	+290.62	+110.44	.04231	.003557	.54645
10	.601	+7.1	+358.47	+138.38	.05211	.004447	.59734
11	.601	+8.1	+434.05	+172.07	.06308	.005531	.63960
12	.600	+9.0	+488.38	+202.72	.07124	.006542	.64920
13	.600	+10.0	+559.89	+242.92	.08164	.007835	.66487
14	.600	+9.7	+537.72	+231.69	.07837	.007469	.65593
15	.600	+9.3	+511.67	+215.36	.07452	.006938	.65480
16	.600	+9.1	+486.10	+203.48	.07082	.006557	.64185
17	.600	+8.7	+464.47	+190.66	.06766	.006143	.63977
18	.600	+8.4	+442.33	+178.89	.06437	.005768	.63335
19	.600	+8.0	+418.67	+166.64	.06102	.005373	.62660
20	.601	+7.5	+385.66	+150.37	.05605	.004834	.61305
21	.600	+7.1	+363.62	+139.71	.05287	.004494	.60422
22	.601	+6.7	+343.12	+130.17	.04988	.004185	.59435
23	.601	+6.2	+313.29	+118.37	.04553	.003805	.57022
24	.600	+5.5	+264.02	+99.67	.03839	.003206	.52484
25	.600	+4.5	+208.97	+80.57	.03039	.002592	.45645
26	.600	+8.3	+447.38	+179.91	.06519	.005799	.64102
27	.600	+9.2	+504.54	+211.34	.07351	.006811	.65347
28	.600	+9.2	+503.69	+211.34	.07347	.006819	.65221
29	.600	+.8	+7.47	+36.53	.00109	.001176	.00690
30	0.000	+.0	+.30	+.15	0.00000	0.000000	0.00000
31	0.000	+.0	+.41	+1.80	0.00000	0.000000	0.00000
32	0.000	+.0	+1134.44	+288.13	0.00000	0.000000	0.00000
33	0.000	+.0	-.20	+.36	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 51 DATE :1 NOVEMBER 1982 / 10:30 OAT= 74.5 BAROMETER= 29.97 WET BULB TEMP= 62 DRY BULB TEMP= 74.5
WIND CONDITIONS :0 to 3 Kts SOUTH Z/R= .75
SUMMARY:S-76 BLADES W/ RECTANGULAR TIPS/ IGE

CONFIGURATION FILE : DATA2 S76[[[]wEXT/NoTail/*INACTIVE*
DATA FILE : TIP06I:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.099996 in. = .258333 ft.
SOLIDITY : .0784329

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001000 +.61898(Ct)^1.9 +270.265(Ct)^3

STANDARD DEVIATION = 5.87878E-16
MEAN ERROR = -1.20000E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+1.25	+1.88	0.00000	0.000000	0.00000
2	0.000	+0.0	+1135.34	+287.82	0.00000	0.000000	0.00000
3	0.000	+0.0	+.98	+.56	0.00000	0.000000	0.00000
4	0.000	+0.0	+.71	+.08	0.00000	0.000000	0.00000
5	.602	+.0	+.64	+34.34	.00012	.001424	.00018
6	.602	+2.1	+58.52	+38.48	.01133	.001595	.14184
7	.602	+4.1	+175.71	+59.94	.03406	.002488	.47408
8	.602	+5.2	+245.77	+78.78	.04760	.003267	.59647
9	.602	+5.2	+243.97	+78.39	.04725	.003251	.59202
10	.601	+6.2	+305.64	+98.35	.05936	.004090	.66356
11	.601	+7.1	+371.82	+122.42	.07209	.005083	.71470
12	.602	+8.2	+442.61	+152.33	.08577	.006321	.74571
13	.601	+9.2	+505.14	+187.02	.09817	.007783	.74165
14	.601	+9.7	+552.87	+210.25	.10722	.008731	.75463
15	.601	+9.4	+534.44	+199.53	.10366	.008287	.75575
16	.601	+9.6	+539.81	+206.69	.10467	.008596	.74135
17	.602	+9.1	+512.11	+186.31	.09919	.007810	.75059
18	.601	+8.6	+476.22	+171.09	.09235	.007104	.74128
19	.602	+8.1	+447.13	+155.88	.08656	.006425	.74377
20	.602	+7.7	+422.96	+144.71	.08184	.005996	.73279
21	.602	+7.7	+392.87	+131.33	.07588	.005443	.72071
22	.602	+7.0	+373.67	+124.37	.07233	.005155	.70816
23	.602	+3.1	+123.75	+49.44	.02396	.002050	.33960
24	.601	+9.0	+505.13	+185.73	.09803	.007718	.74624
25	.601	+9.0	+500.99	+185.48	.09736	.007715	.73893
26	.601	+8.3	+458.41	+162.42	.08888	.006743	.73743
27	.602	+9.3	+518.23	+194.85	.10044	.008087	.73870
28	.601	+.5	+3.86	+34.91	.00075	.001450	.00265
29	.602	+10.3	+545.54	+210.34	.10553	.008713	.73839
30	0.000	+10.3	-.71	+.08	0.00000	0.000000	0.00000
31	0.000	+10.3	+1.25	+2.03	0.00000	0.000000	0.00000
32	0.000	+10.3	+1134.05	+287.76	0.00000	0.000000	0.00000
33	0.000	+10.3	-.71	+.65	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN #: 52 DATE :1 NOVEMBER 1982 / 11:13 OAT= 70 BAROMETER= 29.965 WET BULB T
EMP= 61.5 DRY BULB TEMP= 70
WIND CONDITIONS :0 to 3 Kts SOUTH Z/P= 1.2
SUMMARY:3-76 BLADES W/ RECTANGULAR TIPS/ IGE

CONFIGURATION FILE : DATA2 $76[[[]WEXT/NoTa:1/*INACTIVE*
DATA FILE : TIP052:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.099996 in. = .258333 ft.
SOLIDITY : .0704325

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000982 +.67004(Ct)^1.5 +296.003(Ct)^3

STANDARD DEVIATION = 2.17515E-15
MEAN ERROR = 4.44000E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+1.35	+2.17	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.53	+286.80	0.00000	0.000000	0.00000
3	0.000	+0.0	-.23	+1.57	0.00000	0.000000	0.00000
4	0.000	+0.0	-.00	+.37	0.00000	0.000000	0.00000
5	.601	-.0	-4.53	+33.49	-.00008	.001395	.00351
6	.599	+2.0	+50.95	+36.79	.00997	.001542	.12118
7	.600	+4.0	+161.96	+57.85	.03162	.002419	.43629
8	.599	+6.0	+283.63	+94.36	.05543	.003949	.62019
9	.599	+7.0	+347.67	+119.56	.06803	.005009	.66469
10	.599	+8.0	+413.01	+148.36	.08086	.006220	.69377
11	.598	+9.0	+479.61	+184.02	.09415	.007736	.70083
12	.599	+9.5	+507.60	+200.91	.09938	.008423	.69800
13	.479	+9.7	+519.52	+210.03	0.00000	0.000000	0.00000
14	.599	+9.0	+480.46	+184.74	.09405	.007744	.69897
15	.599	+8.7	+463.48	+175.65	.09055	.007349	.69585
16	.599	+8.4	+442.29	+164.79	.08642	.006895	.69146
17	.599	+8.2	+435.96	+159.63	.08520	.006680	.69858
18	.599	+8.2	+431.50	+158.76	.08443	.006652	.69208
19	.599	+8.0	+415.24	+150.13	.08131	.006295	.69120
20	.599	+7.7	+399.78	+142.12	.07832	.005962	.68991
21	.599	+7.4	+380.63	+134.98	.07448	.005655	.67443
22	.600	+7.2	+371.37	+129.78	.07250	.005421	.67565
23	.599	+6.8	+319.61	+107.92	.06244	.004515	.64857
24	.599	+6.2	+302.16	+102.13	.05904	.004273	.62999
25	.599	+5.7	+266.59	+89.56	.05221	.003756	.59608
26	.599	+5.2	+237.54	+79.90	.04647	.003347	.56162
27	.599	+4.9	+218.81	+73.78	.04284	.003094	.53797
28	.599	+9.0	+478.58	+184.17	.09357	.007712	.69648
29	.599	+8.7	+464.37	+175.44	.09073	.007340	.69870
30	.599	-.1	+2.11	+34.00	.00041	.001423	.00110
31	0.000	-.1	+.00	+.37	0.00000	0.000000	0.00000
32	0.000	-.1	+1.97	+2.32	0.00000	0.000000	0.00000
33	0.000	-.1	+1135.15	+287.58	0.00000	0.000000	0.00000
34	0.000	-.1	+.00	+.73	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 53 DATE :1 NOVEMBER 1982 /14:27 OAT= 73 BAROMETER= 29.92 WET BULB TEM
P= 63 DRY BULB TEMP= 73
WIND CONDITIONS :0 to 3 Kts/ SOUTH Z/R= 1.2
$UMMARY:$-76 BLADE$ W/ RECTANGULAR TIP$/ ***** REPEAT OF TIP052 BECAUSE OF DAMAG
E TO TIP #3

CONFIGURATION FILE : DATA2 $76[[[]WEXT/NoTail/*INACTIVE*
DATA FILE : TIP053:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.099996 in. = .258333 ft.
SOLIDITY : .0704329

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000978 +.67558(Ct)^1.5 +279.698(Ct)^3

STANDARD DEVIATION = 3.076566E-15
MEAN ERROR = 6.28000E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+2.53	+1.59	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.53	+287.65	0.00000	0.000000	0.00000
3	0.000	+0.0	-.23	+.72	0.00000	0.000000	0.00000
4	0.000	+0.0	+.25	+.21	0.00000	0.000000	0.00000
5	.600	-.8	-4.20	+33.70	-.00002	.001407	.00313
6	.600	+2.1	+57.31	+37.79	.01118	.001577	.14066
7	.601	+4.0	+168.97	+57.55	.03132	.002398	.43381
8	.601	+6.0	+274.54	+91.34	.05350	.003811	.60924
9	.601	+7.1	+350.16	+121.23	.06821	.005057	.66110
10	.600	+8.2	+422.64	+153.04	.08253	.006399	.69530
11	.600	+9.3	+483.02	+185.78	.09432	.007768	.69978
12	.600	+9.7	+516.36	+204.68	.10071	.008549	.70164
13	.599	+9.7	+516.27	+204.56	.10103	.008572	.70300
14	.600	+9.7	+492.38	+189.88	.09615	.007937	.70497
15	.600	+8.8	+471.37	+178.39	.09199	.007454	.70232
16	.600	+8.4	+438.28	+161.47	.08551	.006747	.69548
17	.600	+8.0	+415.57	+150.37	.08110	.006283	.68973
18	.601	+7.6	+400.03	+141.04	.07796	.005886	.69404
19	.601	+7.2	+372.53	+129.63	.07255	.005406	.67932
20	.600	+7.0	+353.00	+121.50	.06885	.005075	.66810
21	.600	+6.6	+315.10	+106.86	.06153	.004468	.64104
22	.601	+5.5	+249.24	+83.57	.04856	.003487	.57598
23	.601	+3.1	+115.46	+48.19	.02250	.002011	.31492
24	.601	+8.4	+427.47	+155.98	.08324	.006504	.69295
25	.599	+9.1	+479.18	+183.59	.09383	.007697	.70067
26	.600	+9.0	+484.17	+185.69	.09461	.007770	.70287
27	.601	+7.6	+391.57	+138.87	.07630	.005795	.68255
28	.601	+.9	+21.87	+34.81	.00426	.001452	.03595
29	.600	+8.8	+466.63	+176.86	.09098	.007384	.69744
30	0.000	+8.8	-.25	+.21	0.00000	0.000000	0.00000
31	0.000	+8.8	+2.40	+1.89	0.00000	0.000000	0.00000
32	0.000	+8.8	+1134.14	+288.31	0.00000	0.000000	0.00000
33	0.000	+8.8	-.25	+.12	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 54 DATE :1 NOV 1982 OAT= 73 BAROMETER= 29.92 WET BULB TEMP= 62.7 DRY BULB TEMP= 73
WIND CONDITIONS :GUSTY 0-3 SOUTH Z/R= 3
SUMMARY:3-76 BLADES W/ RECTANGULAR TIPS/

CONFIGURATION FILE : DATA2 376[[[]WEMT/NoTail-*INACTIVE=
DATA FILE : TIP054:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.099996 in. = .258333 ft.
SOLIDITY : .0784329

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000969 +.78142(Ct)^1.5 +305.160(Ct)^3

STANDARD DEVIATION = 3.33279E-16
MEAN ERROR = -7.27273E-17

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+2.48	+2.03	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.44	+286.47	0.00000	0.000000	0.00000
3	0.000	+0.0	-.31	+1.91	0.00000	0.000000	0.00000
4	0.000	+0.0	+.30	+.08	0.00000	0.000000	0.00000
5	.600	+.3	+2.58	+33.53	.00050	.001402	.00152
6	.601	+2.1	+54.90	+37.64	.01060	.001569	.13212
7	.601	+4.1	+154.39	+56.25	.03002	.002342	.41679
8	.601	+6.1	+269.57	+91.96	.05249	.003834	.58859
9	.601	+7.1	+332.71	+117.46	.06471	.004892	.63144
10	.601	+8.1	+395.21	+146.08	.07699	.006090	.65822
11	.601	+8.5	+430.38	+161.94	.08364	.006739	.67361
12	.600	+9.1	+463.06	+181.14	.09026	.007561	.67387
13	.600	+9.5	+491.91	+198.84	0.00000	0.000000	0.00000
14	.600	+9.5	+490.97	+198.39	0.00000	0.000000	0.00000
15	.600	+9.3	+479.00	+190.17	.09344	.007943	.67473
16	.601	+8.8	+451.97	+173.52	.08801	.007235	.67722
17	.601	+8.3	+413.91	+153.95	.08055	.006416	.66872
18	.601	+7.8	+392.81	+141.86	.07639	.005907	.67071
19	.601	+7.5	+371.49	+133.70	.07230	.005572	.65472
20	.601	+7.3	+357.06	+126.20	.06945	.005256	.65346
21	.602	+6.7	+325.27	+112.39	.06313	.004671	.63727
22	.601	+6.5	+305.16	+106.27	.05937	.004427	.61320
23	.602	+6.3	+288.79	+100.42	.05605	.004173	.59665
24	.600	+9.1	+469.48	+184.74	.09157	.007717	.67383
25	.601	+9.5	+494.93	+200.68	0.00000	0.000000	0.00000
26	.601	+6.0	+277.78	+94.78	.05401	.003946	.59695
27	.601	+5.8	+218.53	+74.94	.04254	.003124	.52787
28	.600	+8.7	+446.67	+171.21	.08710	.007149	.67478
29	.601	+9.0	+466.45	+182.55	.09085	.007614	.67497
30	0.000	+9.0	-.30	+.08	0.00000	0.000000	0.00000
31	0.000	+9.0	+2.35	+2.03	0.00000	0.000000	0.00000
32	0.000	+9.0	+1134.46	+288.06	0.00000	0.000000	0.00000
33	0.000	+9.0	-.30	+.32	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

[illegible] STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 55 DATE : 11 NOVEMBER 1982 : 16:27 OAT= 71 BAROMETER= 29.93 WET BULB TE
MP= 62 DRY BULB TEMP= 71
WIND CONDITIONS :0 to 3 kts SOUTH-SOUTHWEST C/R= 3
SUMMARY:3-76 BLADES W/ RECTANGULAR TIPS/ OGE

CONFIGURATION FILE : DATA2 3T6[[[]WEXT/NoTail/*INACTIVE*
DATA FILE : TIP055:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.099996 in. = .258333 ft.
SOLIDITY : .0784325

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000983 +.68612(Ct)^1.5 +412.914(Ct)^3

STANDARD DEVIATION = 5.11453E-15
MEAN ERROR = 1.04408E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+2.29	+1.65	0.00000	0.000000	0.00000
2	0.000	+0.0	+1135.03	+287.74	0.00000	0.000000	0.00000
3	0.000	+0.0	+.27	+.63	0.00000	0.000000	0.00000
4	0.000	+0.0	-.22	+.15	0.00000	0.000000	0.00000
5	.651	+.0	-1.42	+39.69	-.00024	.001408	.00048
6	.650	+4.9	+252.02	+86.66	.04185	.003082	.52135
7	.651	+5.9	+324.28	+111.89	.05371	.003968	.58863
8	.652	+6.8	+398.59	+143.03	.06594	.005067	.62714
9	.651	+7.8	+482.30	+184.04	.07991	.006526	.64948
10	.651	+8.2	+516.43	+203.15	.08559	.007210	.65178
11	.651	+8.4	+527.24	+211.16	.08749	.007503	.64725
12	.652	+1.8	+63.29	+44.85	.01047	.001578	.12743
13	.651	+2.8	+121.04	+54.15	.02005	.001921	.27742
14	.651	+3.8	+176.88	+66.90	.02967	.002376	.40364
15	.652	+7.8	+483.00	+185.27	.07993	.006565	.64593
16	.651	+8.1	+497.41	+193.85	.08256	.006890	.64615
17	.651	+8.6	+535.69	+215.78	.08888	.007667	.64865
18	.651	+7.3	+445.50	+166.87	.07379	.005890	.63861
19	.651	+6.3	+363.10	+127.88	.06020	.004540	.61053
20	.651	+6.8	+403.44	+145.56	.06683	.005164	.62782
21	.651	+7.0	+420.89	+153.02	.06970	.005426	.63637
22	.651	+7.6	+465.06	+175.22	.07698	.006211	.64537
23	.651	+6.6	+385.84	+137.36	.06394	.004874	.62249
24	.651	+6.5	+352.83	+123.59	.05831	.004384	.60277
25	.652	+5.2	+280.11	+96.95	.04635	.003435	.54507
26	.651	+4.2	+212.32	+76.08	.03518	.002699	.45876
27	.651	+3.2	+144.56	+59.37	.02397	.002108	.33040
28	.651	+7.1	+427.51	+156.14	.07095	.005549	.63914
29	.651	+7.7	+480.42	+183.47	.07965	.006514	.64765
30	0.000	+7.7	+.22	+.15	0.00000	0.000000	0.00000
31	0.000	+7.7	+2.29	+1.98	0.00000	0.000000	0.00000
32	0.000	+7.7	+1134.99	+288.16	0.00000	0.000000	0.00000
33	0.000	+7.7	-.48	+.12	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 56 DATE :1 NOVEMBER 1982 : 17:00 OAT= 60 BAROMETER= 29.935 WET BULB T
EMP= 61 DRY BULB TEMP= 68
WIND CONDITIONS :0 to 3 kts SOUTH-SOUTHWEST Z/R= 3
SUMMARY:8-76 BLADES W/ RECTANGULAR TIPS/ OGE

CONFIGURATION FILE : DATA2 STATIONARY/NoTail/*INACTIVE*
DATA FILE : TIP056:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.099996 in. = .258333 ft.
SOLIDITY : .0704325

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000970 +.73694(Ct)^1.5 +217.592(Ct)^3

STANDARD DEVIATION = 3.89715E-15
MEAN ERROR = 8.71429E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+2.28	+1.77	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.74	+287.44	0.00000	0.000000	0.00000
3	0.000	+0.0	-.02	+.93	0.00000	0.000000	0.00000
4	0.000	+0.0	-.02	+.42	0.00000	0.000000	0.00000
5	.550	+.3	+2.48	+28.17	.00058	.001400	.00185
6	.550	+1.8	+46.99	+32.13	.01090	.001596	.13380
7	.551	+3.8	+128.40	+47.95	.02976	.002379	.40483
8	.551	+5.9	+220.16	+75.55	.05098	.003746	.57664
9	.551	+6.9	+270.95	+95.20	.06280	.004725	.62582
10	.550	+7.8	+318.47	+116.49	.073 4	.005791	.65155
11	.550	+8.8	+371.81	+141.47	.08626	.007028	.67648
12	.550	+9.3	+399.43	+156.44	.09269	.007774	.68124
13	.550	+9.6	+413.18	+163.28	.09599	.008123	.68707
14	.551	+9.8	+428.99	+172.85	.09942	.008538	.68902
15	.550	+10.3	+449.43	+185.88	.10433	.009239	.68441
16	.550	+10.6	+458.43	+193.71	0.00000	0.000000	0.00000
17	.551	+9.7	+420.58	+167.84	.09748	.008332	.68850
18	.551	+9.3	+401.58	+157.87	.09306	.007794	.68358
19	.550	+9.4	+397.34	+154.76	.09224	.007693	.68333
20	.551	+8.9	+381.79	+146.51	.08836	.007261	.67885
21	.550	+10.8	+381.86	+145.48	.08854	.007234	.68342
22	.551	+5.9	+225.69	+78.19	.05224	.003875	.57813
23	.551	+7.0	+252.63	+88.09	.05851	.004369	.60795
24	.550	+7.9	+274.72	+96.79	.06371	.004807	.62784
25	.551	+8.7	+295.30	+105.62	.06834	.005234	.64058
26	.551	+9.9	+321.68	+116.87	.07444	.005791	.65817
27	0.000	+9.9	+.62	+.42	0.00000	0.000000	0.00000
28	0.000	+9.9	+2.16	+2.84	0.00000	0.000000	0.00000
29	0.000	+9.9	+1134.79	+288.84	0.00000	0.000000	0.00000
30	0.000	+9.9	+.02	+.36	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 57 DATE :8 NOVEMBER 1982 / 08:37 OAT= 52.5 BAROMETER= 30.131 WET BULB TEMP= 44 DRY BULB TEMP= 52.5
WIND CONDITIONS :LIGHT 0 to 2 kts/ NORTHZ/R= .75
SUMMARY:S-76 BLADES W/RECTANGULAR TIPS / RPT OF TIP057

CONFIGURATION FILE : DATA2 S76CIII#EXT/NoTail/*INACTIVE*
DATA FILE : TIP057:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.099996 in. = .258333 ft.
SOLIDITY : .0704325

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000992 +.61777(Ct)^1.5 +261.930(Ct)^3

STANDARD DEVIATION = 4.73077E-15
MEAN ERROR = 9.46154E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-1.44	+1.68	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.03	+288.13	0.00000	0.000000	0.00000
3	0.000	+0.0	-.73	+.24	0.00000	0.000000	0.00000
4	0.000	+0.0	-1.10	+.38	0.00000	0.000000	0.00000
5	.601	-.0	+4.39	+33.62	.00085	.001389	.00333
6	.601	+2.0	+76.19	+41.15	.01468	.001698	.19660
7	.601	+4.1	+194.94	+64.82	.03755	.002674	.51074
8	.601	+5.8	+258.24	+82.49	.04982	.003407	.61238
9	.600	+6.0	+326.41	+105.31	.06316	.004364	.68265
10	.601	+7.2	+409.98	+137.32	.07919	.005679	.73630
11	.600	+8.1	+463.02	+163.35	.08968	.006775	.74389
12	.600	+9.1	+530.23	+198.15	.10254	.008206	.75096
13	.600	+8.7	+507.98	+186.51	.09818	.007719	.74791
14	.600	+8.5	+498.27	+180.27	.09655	.007480	.75269
15	.601	+8.4	+493.40	+177.45	.09531	.007348	.75238
16	.601	+8.1	+469.91	+166.23	.09062	.006864	.74575
17	.600	+7.5	+436.90	+149.32	.08460	.006191	.74585
18	.600	+7.2	+412.45	+139.03	.07986	.005764	.73474
19	.600	+8.0	+468.85	+164.82	.09070	.006828	.75079
20	.601	+7.0	+404.18	+135.76	.07808	.005613	.72939
21	.601	+6.8	+389.11	+129.81	.07516	.005336	.72466
22	.601	+6.4	+360.18	+117.87	.06951	.004838	.71083
23	.601	+5.5	+304.44	+96.78	.05873	.003995	.66960
24	.601	+4.6	+241.40	+77.12	.04657	.003186	.59200
25	.602	+3.6	+169.42	+59.06	.03260	.002434	.45394
26	.601	+3.0	+135.54	+51.77	.02611	.002136	.37076
27	.601	+2.5	+110.39	+47.30	.02129	.001954	.29643
28	.601	+1.5	+60.35	+39.11	.01166	.001618	.14601
29	.600	+.9	+33.83	+35.78	.00654	.001481	.06699
30	.601	+.0	+11.17	+34.31	.00216	.001419	.01324
31	0.000	+.0	+1.10	+.30	0.00000	0.000000	0.00000
32	0.000	+.0	+1.77	+1.65	0.00000	0.000000	0.00000
33	0.000	+.0	+1136.34	+287.62	0.00000	0.000000	0.00000
34	0.000	+.0	+1.71	+.66	0.00000	0.000000	0.00000

RUN # : 58 DATE :8 NOVEMBER OAT= 50 BAROMETER= 30.132 WET BULB TEMP= 44 DRY B
ULB TEMP= 50
WIND CONDITIONS :GUSTY 0-2Knots/ SOUTH 2/R= 1.2
SUMMARY:8-76 WITH RECTANGLE TIPS / REPEAT OF 'TIP052' AND 'TIP053'

CONFIGURATION FILE : DATA2 $76[[[]WEXT/NoTail/*INACTIVE*
DATA FILE : TIP058:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.699996 in. = .258333 ft.
SOLIDITY : .0704325

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000950 .68390(Ct)^1.5 +264.780(Ct)^3

STANDARD DEVIATION = 8.65385E-16
MEAN ERROR = 1.73077E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque .ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-2.98	+1.57	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.22	+287.34	0.00000	0.000000	0.00000
3	0.000	+0.0	-.55	+1.03	0.00000	0.000000	0.00000
4	0.000	+0.0	-.44	+.87	0.00000	0.000000	0.00000
5	.599	+.0	+7.92	+32.38	.00154	.001346	.00841
6	.599	+2.0	+72.72	+39.16	.01414	.001631	.19351
7	.599	+4.0	+179.56	+61.71	.03487	.002568	.47612
8	.599	+6.0	+307.09	+102.57	.05972	.004271	.64123
9	.599	+7.1	+378.23	+131.21	.07356	.005464	.68514
10	.599	+8.0	+437.01	+159.86	.08498	.006656	.69839
11	.599	+9.1	+502.70	+195.28	.09776	.008132	.70538
12	.598	+9.6	+535.02	+214.33	.10405	.008951	.70567
13	.597	+9.6	+531.11	+212.35	.10372	.008880	.70590
14	.598	+9.3	+520.60	+205.42	.10154	.008579	.70771
15	.598	+8.8	+485.21	+186.64	.09451	.007784	.70838
16	.598	+8.6	+473.84	+178.99	.09218	.007469	.70319
17	.598	+8.3	+456.89	+170.21	.08913	.007110	.70234
18	.598	+8.3	+457.15	+169.22	.08924	.007073	.70728
19	.598	+7.5	+418.98	+147.20	.08014	.006146	.69264
20	.598	+7.5	+409.57	+146.33	.07984	.006108	.69389
21	.598	+7.3	+396.95	+139.97	.07730	.005836	.69098
22	.598	+7.8	+424.22	+153.59	.08257	.006402	.69556
23	.599	+6.8	+361.83	+124.70	.07034	.005191	.67441
24	.599	+6.5	+345.12	+118.31	.06714	.004929	.66239
25	.599	+6.3	+331.48	+112.14	.06443	.004668	.65760
26	.598	+5.5	+279.41	+92.88	.05439	.003872	.61488
27	.598	+4.5	+217.71	+72.90	.04239	.003040	.53884
28	.598	+3.5	+152.81	+55.96	.02976	.002333	.41286
29	.599	+2.5	+101.38	+45.64	.01971	.001900	.27333
30	.599	+.1	-15.93	+33.19	.00310	.001382	.02342
31	0.000	+.1	+.44	+.87	0.00000	0.000000	0.00000
32	0.000	+.1	-1.18	+1.72	0.00000	0.000000	0.00000
33	0.000	+.1	-1135.44	+287.79	0.00000	0.000000	0.00000
34	0.000	+.1	+.56	+.46	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 59 DATE :8 NOVEMBER 1982 / 13:48 OAT= 62 BAROMETER= 30.01 WET BULB TEMP= 51 DRY BULB TEMP= 62
WIND CONDITIONS :GUSTY 0-4 KNTS/SOUTH Z/R= 3
SUMMARY:H-34 CALIBRATION RUN

CONFIGURATION FILE : DATA5 H34[111]/MoTail/**INACTIVE**
DATA FILE : TIP059:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 54.24996 in. = 4.52083 ft.
  CHORD : 4.250004 in. = .354167 ft.
  SOLIDITY : .099747

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001115 +.83571(Ct)^1.5 +108.472(Ct)^3

STANDARD DEVIATION = 2.49959E-15
MEAN ERROR = 5.45455E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+.63	+1.69	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.82	+287.89	0.00000	0.000000	0.00000
3	0.000	+0.0	+.06	+.48	0.00000	0.000000	0.00000
4	0.000	+0.0	+.06	+.15	0.00000	0.000000	0.00000
5	.600	+.0	+6.52	+33.97	.00095	.001099	.00598
6	.600	+2.1	+77.52	+44.11	.01136	.001430	.18918
7	.600	+4.1	+184.11	+71.21	.02696	.002306	.42861
8	.600	+6.1	+301.54	+112.56	.04417	.003647	.56842
9	.600	+7.1	+369.41	+141.88	.05410	.004596	.61143
10	.600	+7.5	+397.80	+155.68	.05826	.005044	.62271
11	.600	+8.0	+435.72	+173.62	.06380	.005623	.63996
12	.600	+8.6	+469.85	+191.78	.06874	.006217	.64742
13	.600	+8.8	+481.87	+198.85	.07035	.006487	.65048
14	.599	+9.1	+499.69	+209.79	.07334	.006810	.65137
15	.599	+8.6	+465.94	+190.76	.06838	.006192	.64485
16	.600	+8.0	+434.22	+174.22	.06354	.005639	.63427
17	.600	+7.5	+406.68	+159.19	.05958	.005159	.62956
18	.601	+7.0	+369.32	+143.23	.05394	.004627	.60462
19	.601	+6.5	+337.95	+128.48	.04934	.004147	.59023
20	.601	+5.5	+276.47	+103.08	.04042	.003334	.54445
21	.601	+5.1	+247.87	+92.42	.03617	.002983	.51495
22	.600	+4.6	+216.49	+81.88	.03166	.002646	.47545
23	.600	+3.6	+158.78	+64.16	.02325	.002078	.38098
24	.600	+2.5	+103.88	+50.86	.01520	.001647	.25400
25	.601	+1.5	+59.34	+41.29	.00867	.001334	.13510
26	.601	+.1	+11.95	+35.26	.00174	.001137	.01429
27	0.000	+.1	-.06	+.15	0.00000	0.000000	0.00000
28	0.000	+.1	+.76	+1.95	0.00000	0.000000	0.00000
29	0.000	+.1	+1134.58	+287.89	0.00000	0.000000	0.00000
30	0.000	+.1	-.55	+.45	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 60 DATE :8 NOVEMBER 1982 17:41 OAT= 50 BAROMETER= 30.009 WET BULB TEMP= 49 DRY BULB TEMP= 58
WIND CONDITIONS :GUSTY 0 to 4 kts / SOUTH Z/R= 3
SUMMARY:S-70 BLADES W/ 20 Deg SWEPT TIPS /OGE / RPT OF TIP082

CONFIGURATION FILE : DATA1 S70[III]WEXT/NoTail/*INACTIVE*
DATA FILE : TIP060:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.22396 in. = 4.68533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0815251

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001031 +.67783(Ct)^1.5 +252.779(Ct)^3

STANDARD DEVIATION = 1.79844E-15
MEAN ERROR = -3.75000E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+1.03	+1.13	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.43	+287.40	0.00000	0.000000	0.00000
3	0.000	+0.0	-.32	+.98	0.00000	0.000000	0.00000
4	0.000	+0.0	-.32	+.23	0.00000	0.000000	0.00000
5	.601	-.8	+14.16	+36.33	.00236	.001298	.01789
6	.600	+2.1	+76.58	+43.02	.01279	.001533	.19045
7	.600	+4.0	+179.16	+64.36	.02991	.002293	.45548
8	.601	+5.1	+239.21	+81.07	.03983	.002881	.55704
9	.599	+6.2	+308.67	+104.57	.05157	.003736	.63472
10	.600	+7.1	+368.50	+129.45	.06146	.004608	.66757
11	.599	+8.1	+435.97	+160.54	.07284	.005725	.69330
12	.599	+9.2	+510.97	+198.75	.08540	.007090	.71873
13	.600	+9.3	+521.81	+205.41	.08696	.007306	.70867
14	.600	+9.0	+494.07	+191.09	.08245	.006806	.70230
15	.599	+8.4	+457.01	+170.50	.07638	.006082	.70074
16	.600	+8.0	+429.83	+157.15	.07171	.005595	.69284
17	.600	+7.8	+411.82	+150.40	.06876	.005360	.67921
18	.600	+7.5	+401.74	+144.28	.06700	.005135	.68179
19	.600	+7.5	+401.71	+143.98	.06700	.005125	.68316
20	.599	+7.3	+381.39	+135.18	.06382	.004828	.67421
21	.600	+3.5	+151.53	+58.03	.02530	.002068	.39296
22	.600	+1.5	+64.35	+41.46	.01074	.001477	.15218
23	.599	+8.5	+466.56	+175.73	.07811	.006279	.70194
24	.601	+9.1	+508.29	+197.99	.08437	.007014	.70536
25	.600	+9.1	+503.95	+197.45	.08410	.007033	.70016
26	.600	+8.1	+438.09	+161.86	.07317	.005770	.69254
27	.599	+8.1	+439.71	+162.37	.07346	.005790	.69433
28	.600	+.0	+19.94	+37.80	.00333	.001347	.02880
29	0.000	+.0	+.32	+.23	0.00000	0.000000	0.00000
30	0.000	+.0	+1.04	+1.43	0.00000	0.000000	0.00000
31	0.000	+.0	+1135.07	+288.30	0.00000	0.000000	0.00000
32	0.000	+.0	-.18	+.11	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 61 DATE :8 NOVEMBER 1982 18:27 OAT= 59.5 BAROMETER= 30.02 WET BULB TEMP= 50 DRY BULB TEMP= 59.5
WIND CONDITIONS :GUSTY 0 to 4 kts/ SOUTHWEST Z/R= 3
SUMMARY:S-70 BLADES W/ 20 Deg SWEPT TIPS /RPT OF TIP00/

CONFIGURATION FILE : DATA1 S70[[[]WEXT/NoTail/*INACTIVE*
DATA FILE : TIP061:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.22396 in. = 4.68533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0815251

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001059 +.66318(Ct)^1.5 +300.806(Ct)^3

STANDARD DEVIATION = 2.63931E-19
MEAN ERROR = 4.34783E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+1.66	+1.50	0.00000	0.000000	0.00000
2	0.000	+0.0	+1135.87	+287.98	0.00000	0.000000	0.00000
3	0.000	+0.0	+.32	+.39	0.00000	0.000000	0.00000
4	0.000	+0.0	+.32	+.15	0.00000	0.000000	0.00000
5	.650	+0.0	+13.52	+43.54	.00192	.001318	.01287
6	.650	+2.1	+93.02	+51.73	.01323	.001578	.19564
7	.649	+3.1	+148.39	+60.52	.02000	.001840	.31030
8	.650	+4.1	+209.10	+76.81	.02966	.002326	.44352
9	.650	+5.2	+283.85	+97.81	.04027	.002962	.55089
10	.650	+6.0	+348.59	+119.57	.04949	.003623	.61350
11	.649	+7.0	+436.13	+154.48	.06206	.004690	.66567
12	.650	+8.1	+523.82	+195.96	.07448	.005948	.68972
13	.650	+8.1	+515.57	+193.68	.07326	.005874	.68157
14	.649	+8.5	+550.69	+213.42	0.00000	0.000000	0.00000
15	.650	+8.0	+519.89	+192.96	.07369	.005847	.69082
16	.649	+7.7	+487.45	+179.61	.06942	.005459	.67641
17	.650	+7.3	+457.96	+164.54	.06516	.004997	.67208
18	.650	+7.0	+432.98	+154.94	.06157	.004703	.65596
19	.650	+6.6	+403.98	+140.84	.05739	.004270	.65001
20	.649	+6.3	+378.51	+130.82	.05388	.003974	.63529
21	.649	+6.3	+373.27	+129.83	.05314	.003945	.62695
22	.650	+5.3	+305.58	+104.09	.04336	.003152	.57831
23	.649	+8.2	+541.08	+204.72	.07707	.006224	.69408
24	.653	+8.7	+576.62	+226.23	0.00000	0.000000	0.00000
25	.650	+8.7	+570.99	+223.47	.08119	.006782	.68869
26	.649	+7.5	+475.69	+172.64	.06775	.005248	.67841
27	.649	+7.7	+492.16	+181.85	.07008	.005502	.68074
28	.650	+8.3	+541.85	+206.58	.07705	.006269	.68872
29	.651	+.1	+26.45	+45.81	.00375	.001363	.03406
30	0.000	+.1	-.32	+.15	0.00000	0.000000	0.00000
31	0.000	+.1	+1.66	+1.80	0.00000	0.000000	0.00000
32	0.000	+.1	+1135.87	+288.04	0.00000	0.000000	0.00000
33	0.000	+.1	-.32	+.27	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 62 DATE :8 NOVEMBER 1982 / 19:20 OAT= 59.5 BAROMETER= 30.03 WET BULB TEMP= 50.5 DRY BULB TEMP= 59.5
WIND CONDITIONS :GUSTY 0 to 4 kts/ SOUTHWEST Z/R= 3
SUMMARY:S-70 BLADES W/ 20 Deg SWEPT TIPS /RPT OF TIP001-TIP003

CONFIGURATION FILE : DATA1 S70(III)WEXT/NoTail/*INACTIVE*
DATA FILE : TIP062:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.22396 in. = 4.68533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0815251

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001056 +.68249(Ct)^1.5 +284.252(Ct)^3

STANDARD DEVIATION = 4.50706E-15
MEAN ERROR = 9.20000E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+2.11	+1.67	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.76	+288.12	0.00000	0.000000	0.00000
3	0.000	+0.0	+.00	+.26	0.00000	0.000000	0.00000
4	0.000	+0.0	+.26	+.38	0.00000	0.000000	0.00000
5	.550	-.0	+17.42	+31.35	.00346	.001327	.03090
6	.550	+1.9	+65.12	+36.96	.01292	.001566	.18948
7	.550	+3.9	+151.90	+55.18	.03011	.002334	.45183
8	.550	+6.0	+253.93	+85.22	.05033	.003605	.63229
9	.550	+7.0	+305.30	+106.74	.06050	.004515	.66546
10	.550	+8.0	+359.29	+131.83	.07119	.005575	.68784
11	.551	+8.9	+417.92	+159.54	.08273	.006748	.71273
12	.550	+10.0	+480.98	+193.69	.09545	.008204	.72573
13	.550	+10.3	+494.50	+201.65	.09798	.008527	.72612
14	.550	+10.0	+475.25	+190.60	.09429	.008071	.72427
15	.551	+9.7	+466.79	+185.50	.09231	.007830	.72323
16	.550	+9.5	+451.54	+176.32	.08948	.007457	.72466
17	.550	+9.2	+436.75	+168.42	.08658	.007126	.72180
18	.550	+8.7	+408.72	+154.80	.08098	.006546	.71876
19	.550	+8.5	+396.71	+147.50	.07856	.006234	.71309
20	.550	+8.2	+381.77	+140.36	.07576	.005945	.70821
21	.550	+7.7	+350.51	+126.04	.06943	.005329	.69315
22	.551	+7.4	+335.80	+120.28	.06646	.005081	.68084
23	.550	+7.2	+327.28	+114.91	.06485	.004860	.68614
24	.551	+6.7	+294.13	+101.94	.05821	.004306	.65848
25	.550	+6.4	+281.27	+96.36	.05574	.004076	.65193
26	.551	+6.2	+267.72	+91.77	.05297	.003875	.63518
27	.550	+5.4	+228.37	+76.76	.04527	.003245	.59925
28	.551	+4.9	+205.98	+69.74	.04078	.002942	.56350
29	.550	-.8	-5.07	+32.85	-.00100	.001388	.00463
30	0.000	-.8	-.26	+.38	0.00000	0.000000	0.00000
31	0.000	-.8	+2.11	+1.73	0.00000	0.000000	0.00000
32	0.000	-.8	+1134.75	+297.70	0.00000	0.000000	0.00000
33	0.000	-.8	-.26	+.77	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 63 DATE :9 NOVEMBER 1982 / 08:30 OAT= 51 BAROMETER= 30.26 WET BULB TE
MP= 44 DRY BULB TEMP= 51
WIND CONDITIONS :ZERO Z/R= 3
SUMMARY:S-76 BLADES W/ 20 Deg SWEPT TIPS/ *** DOORS OPEN ***

CONFIGURATION FILE : DATA1 S76(III)WEXT/NoTail/*INACTIVE*
DATA FILE : TIP063:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.22396 in. = 4.68533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0815251

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001058 +.65560(Ct)^1.5 +211.397(Ct)^3

STANDARD DEVIATION = 1.73077E-15
MEAN ERROR = 3.46154E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-2.14	+1.62	0.00000	0.000000	0.00000
2	0.000	+0.0	+1131.33	+288.04	0.00000	0.000000	0.00000
3	0.000	+0.0	-3.43	+.33	0.00000	0.000000	0.00000
4	0.000	+0.0	-2.79	+.33	0.00000	0.000000	0.00000
5	.601	-.0	+16.97	+37.70	.00200	.001327	.02253
6	.601	+1.9	+71.28	+43.60	.01176	.001535	.16778
7	.601	+3.0	+126.98	+53.50	.02092	.001881	.32474
8	.601	+4.0	+178.99	+65.29	.02949	.002295	.44532
9	.601	+5.0	+239.03	+81.81	.03942	.002879	.54873
10	.601	+6.2	+319.70	+107.57	.05272	.003786	.64554
11	.601	+7.0	+382.77	+131.68	.06303	.004628	.69037
12	.601	+8.0	+449.27	+161.73	.07412	.005695	.71543
13	.601	+9.1	+526.25	+201.43	.08677	.007089	.72797
14	.601	+1.5	+66.70	+42.61	.01100	.001500	.15530
15	.600	+9.5	+562.49	+219.70	.09293	.007747	.73831
16	.601	+9.5	+571.92	+224.47	.09439	.007907	.74050
17	.601	+9.3	+550.62	+210.32	.09087	.007462	.73871
18	.601	+9.1	+544.45	+206.89	.08984	.007286	.74612
19	.600	+8.8	+512.75	+191.75	.08460	.006760	.73598
20	.600	+8.5	+499.59	+183.38	.08257	.006469	.74852
21	.601	+8.2	+478.51	+174.09	.07892	.006128	.73044
22	.601	+8.0	+451.18	+163.26	.07433	.005740	.71271
23	.601	+7.7	+443.73	+157.17	.07319	.005533	.72250
24	.601	+7.5	+421.22	+147.27	.06941	.005179	.71277
25	.600	+8.0	+452.41	+162.81	.07470	.005730	.71846
26	.601	+7.1	+390.28	+133.38	.06442	.004696	.70296
27	.601	+6.7	+356.85	+120.88	.05882	.004253	.67727
28	.601	+6.3	+337.92	+112.34	.05573	.003954	.67173
29	.601	+7.8	+443.29	+156.18	.07304	.005493	.72564
30	.601	+8.5	+485.91	+177.95	.08010	.006261	.73102
31	0.000	+8.5	+2.79	+.33	0.00000	0.000000	0.00000
32	0.000	+8.5	+.97	+1.77	0.00000	0.000000	0.00000
33	0.000	+8.5	+1134.45	+287.53	0.00000	0.000000	0.00000
34	0.000	+8.5	+2.79	+.78	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN #: 64 DATE :9 NOVEMBER 1982 / 09:18 OAT= 50 BAROMETER= 30.267 WET BULB T
EMP= 43 DRY BULB TEMP= 50
WIND CONDITIONS :ZERO Z/R= 3
SUMMARY:S-70 BLADES W/ 20 Deg SWEPT TIPS/ *** DOORS OPEN *** / RPT OF TIP063

CONFIGURATION FILE : DATA1 S70[1,1]WEXT/NOTAB1/*INACTIVE*
DATA FILE : TIP064:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.22396 in. = 4.68533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0815251

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001062 +.65036(Ct)^1.5 +229.539(Ct)^3

STANDARD DEVIATION = 4.165998E-16
MEAN ERROR = 9.09091E-17

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-1.38	+1.42	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.59	+287.13	0.00000	0.000000	0.00000
3	0.000	+0.0	-.18	+1.24	0.00000	0.000000	0.00000
4	0.000	+0.0	-.42	+.07	0.00000	0.000000	0.00000
5	.601	-.0	+17.36	+38.22	.00296	.001344	.02298
6	.600	+2.1	+81.62	+44.25	.01348	.001560	.20256
7	.601	+3.1	+129.78	+53.97	.02139	.001900	.33249
8	.601	+4.0	+182.36	+64.89	.03006	.002283	.46090
9	.601	+5.0	+240.42	+80.54	.03961	.002832	.56197
10	.601	+6.0	+306.84	+102.68	.05050	.003607	.63530
11	.601	+7.0	+378.02	+129.91	.06232	.004571	.68716
12	.601	+8.0	+446.39	+160.02	.07352	.005625	.71550
13	.600	+9.1	+528.83	+202.84	.08748	.007133	.73231
14	.601	+9.5	+558.33	+219.32	.09207	.007719	.73872
15	.601	+9.5	+561.29	+220.39	.09253	.007755	.73284
16	.601	+9.2	+539.17	+207.29	.08898	.007301	.73394
17	.601	+9.1	+537.76	+203.78	.08862	.007167	.74325
18	.600	+9.1	+535.09	+203.72	.08835	.007179	.73852
19	.600	+8.8	+507.83	+190.61	.08387	.006719	.72986
20	.601	+8.5	+486.88	+179.85	.08032	.006332	.72573
21	.601	+8.3	+473.15	+169.92	0.00000	0.000000	0.00000
22	.601	+8.0	+444.58	+157.83	.07334	.005558	.72146
23	.600	+8.0	+445.35	+159.84	.07354	.005633	.71474
24	.600	+8.3	+467.91	+171.39	.07724	.006039	.71777
25	.601	+8.4	+474.49	+175.20	.07810	.006155	.71597
26	.601	+7.1	+388.21	+133.00	.06397	.004677	.69834
27	.601	-.0	+25.80	+39.84	.00426	.001403	.03996
28	0.000	-.0	+.42	+.07	0.00000	0.000000	0.00000
29	0.000	-.0	-.51	+1.57	0.00000	0.000000	0.00000
30	0.000	-.0	+1135.17	+287.76	0.00000	0.000000	0.00000
31	0.000	-.0	+.41	+.61	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 65 DATE :9 NOVEMBER '92 / 10:30 OAT= 50 BAROMETER= 30.27 WET BULB TE
MP= 43 DRY BULB TEMP= 49
WIND CONDITIONS :GUSTY 0-4 / NNW Z/R= .75
SUMMARY:S-76 BLADES W/ 20-Deg SWEPT TIPS / RPT OF TIP006/ IGE

CONFIGURATION FILE : DATA1 S76[[[]WEXT/NoTail/*INACTIVE*
DATA FILE : TIP065:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.22396 in. = 4.68533' ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0815251

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001078 +.64268(Ct)^1.5 +209.608(Ct)^3

STANDARD DEVIATION = 4.61538E-15
MEAN ERROR = 9.23077E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-.31	+1.08	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.02	+297.92	0.00000	0.000000	0.00000
3	0.000	+0.0	-.74	+.45	0.00000	0.000000	0.00000
4	0.000	+0.0	-.37	+.12	0.00000	0.000000	0.00000
5	.598	+.0	+9.28	+38.05	.00154	.001351	.00907
6	.600	+2.0	+71.45	+43.60	.01183	.001541	.16861
7	.598	+3.1	+118.98	+51.58	.01977	.001830	.30655
8	.598	+4.1	+175.45	+63.68	.02918	.002260	.44520
9	.599	+5.1	+238.36	+80.45	.03961	.002854	.55782
10	.598	+5.1	+238.61	+80.89	.03966	.002842	.56127
11	.598	+6.1	+303.43	+100.98	.05045	.003584	.63849
12	.598	+7.1	+374.64	+127.80	.06230	.004536	.69211
13	.599	+8.2	+449.43	+159.70	.07468	.005664	.72751
14	.599	+9.2	+523.73	+196.34	.08697	.006959	.74415
15	.598	+9.2	+525.17	+195.65	.08738	.006948	.75060
16	.599	+8.8	+495.64	+182.63	.08231	.006473	.73654
17	.599	+8.4	+469.39	+168.61	.07791	.005973	.73504
18	.598	+8.3	+460.81	+164.23	.07649	.005828	.73280
19	.598	+8.1	+447.37	+159.16	.07437	.005647	.72509
20	.599	+7.6	+417.42	+145.68	.06934	.005162	.71413
21	.599	+7.1	+382.35	+128.97	.06351	.004572	.70674
22	.599	+6.8	+357.52	+121.88	.05942	.004295	.68090
23	.599	+6.6	+339.74	+114.39	.05646	.004057	.66759
24	.599	+5.7	+277.38	+91.78	.04602	.003247	.61388
25	.598	+7.9	+435.31	+152.82	.07243	.005398	.72980
26	.599	+8.5	+475.53	+171.49	.07897	.006078	.73711
27	.599	+8.7	+490.34	+178.54	.08138	.006324	.74110
28	.598	+7.6	+421.81	+145.78	.07014	.005174	.72498
29	.599	+6.4	+327.25	+109.92	.05436	.003897	.65663
30	.598	+.1	+6.60	+38.17	.00110	.001356	.00542
31	0.000	+.1	+.37	+.12	0.00000	0.000000	0.00000
32	0.000	+.1	+.31	+1.38	0.00000	0.000000	0.00000
33	0.000	+.1	+1135.27	+297.95	0.00000	0.000000	0.00000
34	0.000	+.1	+.12	+.45	0.00000	0.000000	0.00000

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 66 DATE :9 NOVEMBER 1982 / 11:15 OAT= 55 BAROMETER= 30.27 WET BULB TE
MP= 48 DRY BULB TEMP= 55
WIND CONDITIONS :GUSTY 0-4 / NNW 2/R= 1.2
SUMMARY:S-70 BLADES W. 20 Deg SWEPT TIPS / RPT OF TIP005/ IGE

CONFIGURATION FILE : DATA: S70(II):EXT/NoTail/*INACTIVE*
DATA FILE : TIP005:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.22396 in. = 4.68533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0015251

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001055 +.66629(Ct)^1.5 +230.846(Ct)^3

STANDARD DEVIATION = 4.42309E-15
MEAN ERROR = -8.84615E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-.29	+1.25	0.00000	0.000000	0.00000
2	0.000	+0.0	+1135.04	+287.07	0.00000	0.000000	0.00000
3	0.000	+0.0	+.27	+1.31	0.00000	0.000000	0.00000
4	0.000	+0.0	-.25	+.26	0.00000	0.000000	0.00000
5	.600	-.1	-2.56	+37.46	-.00042	.001324	.00133
6	.601	+1.9	+66.00	+42.41	.01090	.001494	.15367
7	.601	+3.0	+113.08	+50.33	.01865	.001772	.29025
8	.601	+3.9	+166.42	+62.33	.02746	.002195	.41847
9	.601	+5.1	+248.92	+82.17	.03977	.002895	.55313
10	.601	+6.0	+297.33	+99.27	.04904	.003494	.62744
11	.601	+7.0	+363.19	+125.19	.05991	.004408	.67189
12	.600	+7.9	+431.80	+154.93	.07132	.005461	.70408
13	.600	+9.0	+508.40	+193.45	.08400	.006822	.72050
14	.600	+9.0	+505.89	+193.39	.08375	.006833	.71611
15	.601	+9.4	+542.96	+212.09	.08961	.007470	.72494
16	.601	+9.2	+525.84	+203.53	.08680	.007171	.72005
17	.601	+8.9	+501.17	+190.50	.08262	.006706	.71492
18	.600	+8.9	+498.62	+191.44	.08234	.006747	.70698
19	.601	+8.7	+489.06	+183.22	.08052	.006439	.71650
20	.601	+8.5	+478.84	+176.56	.07902	.006218	.72116
21	.601	+8.2	+455.70	+166.69	.07520	.005871	.70917
22	.601	+7.9	+438.36	+158.44	.07222	.005571	.70335
23	.600	+7.5	+405.85	+144.81	.06704	.005077	.69026
24	.601	+7.2	+385.41	+134.73	.06363	.004748	.68257
25	.600	+7.0	+371.63	+128.94	.06145	.004551	.67586
26	.601	+6.7	+348.63	+119.88	.05760	.004213	.65909
27	.600	+6.4	+328.34	+112.29	.05423	.003958	.64411
28	.600	+6.2	+307.58	+105.06	.05088	.003709	.62467
29	.601	+8.2	+455.00	+164.74	.07498	.005794	.71543
30	.600	+8.8	+500.52	+187.51	.08269	.006612	.72607
31	0.000	+8.8	+.25	+.26	0.00000	0.000000	0.00000
32	0.000	+8.8	+.33	+1.40	0.00000	0.000000	0.00000
33	0.000	+8.8	+1135.65	+288.30	0.00000	0.000000	0.00000
34	0.000	+8.8	+.25	+.02	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN #: 67 DATE :9 NOVEMBER 1982 / 17:46 OAT= 49 BAROMETER= 30.295 WET BULB T
EMP= 40 DRY BULB TEMP= 49
WIND CONDITIONS :ZERO Z/R= .75
SUMMARY:H-34 MAIN ROTOR W/ FUSELAGE/ NO TAIL ROTOR PRESENT / AERODYNAMICIST S RE
QUEST

CONFIGURATION FILE : DATA5 H34(III/NoTail/**INACTIVE**
DATA FILE : TIP067:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 54.24996 in. = 4.52083 ft.
CHORD : 4.250004 in. = .354167 ft.
SOLIDITY : .099747

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001118 +.69872(Ct)^1.5 +136.756(Ct)^3

STANDARD DEVIATION = 2.69231E-15
MEAN ERROR = 5.38462E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-.87	+.60	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.46	+287.23	0.00000	0.000000	0.00000
3	0.000	+0.0	-.38	+1.14	0.00000	0.000000	0.00000
4	0.000	+0.0	-.31	+.63	0.00000	0.000000	0.00000
5	.602	+.0	+.10	+34.76	.00001	.001108	.00001
6	.602	+2.2	+87.70	+44.48	.01263	.001417	.22368
7	.602	+3.5	+171.57	+62.25	.02471	.001983	.43744
8	.602	+4.6	+236.36	+79.78	.03409	.002545	.55232
9	.602	+5.1	+266.99	+89.11	.03851	.002843	.59361
10	.601	+6.1	+337.22	+112.52	.04868	.003593	.66761
11	.602	+7.1	+405.89	+140.92	.05851	.004491	.70539
12	.601	+8.1	+478.29	+173.33	.06907	.005537	.73218
13	.601	+9.1	+547.92	+207.39	.07928	.006638	.75101
14	.602	+9.1	+543.84	+206.13	.07831	.006575	.74428
15	.602	+8.8	+523.51	+195.86	.07552	.006224	.74464
16	.601	+8.5	+504.49	+186.20	.07283	.005946	.73818
17	.601	+8.2	+488.17	+177.56	.07059	.005679	.73748
18	.601	+8.1	+481.16	+174.65	.06948	.005579	.73328
19	.601	+7.8	+458.93	+164.36	.06637	.005258	.72627
20	.601	+7.5	+439.91	+155.65	.06357	.004976	.71944
21	.602	+7.3	+421.59	+147.31	.06081	.004700	.71254
22	.602	+7.0	+405.22	+140.48	.05836	.004473	.70393
23	.602	+6.8	+388.23	+133.44	.05599	.004257	.69505
24	.602	+6.5	+370.12	+125.79	.05332	.004008	.68594
25	.602	+6.2	+352.37	+118.64	.05076	.003780	.67555
26	.602	+5.1	+272.93	+91.33	.03930	.002909	.59809
27	.602	+4.0	+207.81	+72.12	.02989	.002295	.58296
28	.602	+3.0	+147.22	+57.03	.02118	.001815	.37929
29	.601	+1.0	+40.95	+38.66	.00591	.001234	.09223
30	.602	+.0	+1.85	+35.48	.00027	.001131	.00096
31	0.000	+.0	+.31	+.63	0.00000	0.000000	0.00000
32	0.000	+.0	-.25	+.87	0.00000	0.000000	0.00000
33	0.000	+.0	+1135.07	+288.64	0.00000	0.000000	0.00000
34	0.000	+.0	+.31	+.15	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 48 DATE :9 NOVEMBER 1982 18:28 OAT= 43 BAROMETER= 30.309 WET BULB T
EMP= 40 DRY BULB TEMP= 43
WIND CONDITIONS :LIGHT 0 to 3 kts NORTH Z/R= 1.2
SUMMARY:H-34 MAIN ROTOR W/ FUSELAGE NO TAIL ROTOR PRESENT / AERODYNAMICISTS RE
QUEST

CONFIGURATION FILE : DATA5 H34[III]/NoTail **INACTIVE**
DATA FILE : TIP038:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 54.24996 in. = 4.5208 ft.
CHORD : 4.250004 in. = .354167 ft.
SOLIDITY : .099747

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001092 +.76741(Ct)^1.5 +185.802(Ct)^3

STANDARD DEVIATION = 1.83539E-19
MEAN ERROR = -3.91304E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-.89	+1.10	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.94	+287.88	0.00000	0.000000	0.00000
3	0.000	+0.0	+.18	+.50	0.00000	0.000000	0.00000
4	0.000	+0.0	-.31	+.41	0.00000	0.000000	0.00000
5	.598	-.0	+.72	+33.47	.00011	.001079	.00022
6	.599	+2.1	+73.06	+41.87	.01063	.001348	.18164
7	.600	+3.5	+152.55	+59.30	.02214	.001904	.38646
8	.599	+4.5	+211.06	+75.30	.03068	.002421	.49565
9	.599	+5.5	+276.38	+96.90	.04023	.003120	.57762
10	.599	+6.1	+309.00	+109.14	.04496	.003513	.60608
11	.599	+7.0	+382.08	+137.31	.05559	.004419	.66233
12	.598	+8.1	+449.99	+169.24	.06556	.005454	.68735
13	.599	+9.0	+510.19	+199.96	.07430	.006441	.70214
14	.599	+9.1	+517.01	+203.14	.07531	.006545	.70513
15	.598	+8.8	+497.66	+192.88	.07250	.006215	.70139
16	.599	+8.5	+479.63	+183.73	.06975	.005910	.69609
17	.599	+8.3	+466.03	+177.64	.06777	.005714	.68950
18	.598	+8.0	+448.45	+168.61	.06534	.005434	.68638
19	.599	+7.7	+431.60	+160.63	.06284	.005173	.68002
20	.598	+7.5	+415.31	+153.43	.06050	.004944	.67222
21	.599	+7.3	+400.38	+146.32	.05826	.004709	.66682
22	.599	+7.0	+379.21	+137.16	.05516	.004414	.65555
23	.598	+6.3	+333.46	+118.02	.04861	.003806	.62895
24	.599	+5.1	+257.80	+90.51	.03752	.002913	.55700
25	.599	+4.0	+186.22	+68.63	.02707	.002207	.45066
26	.599	+2.5	+103.16	+48.44	.01501	.001559	.26342
27	.599	-.0	+3.69	+34.52	.00054	.001111	.00250
28	0.000	-.0	+.31	+.41	0.00000	0.000000	0.00000
29	0.000	-.0	-.27	+1.25	0.00000	0.000000	0.00000
30	0.000	-.0	+1136.08	+288.45	0.00000	0.000000	0.00000
31	0.000	-.0	+.31	+.05	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 49 DATE :9 NOVEMBER 1982 / 7:07P OAT= 49 BAROMETER= 30.32 WET BULB T
EMP= 40 DRY BULB TEMP= 47.5
WIND CONDITIONS :LIGHT 0 to 3 kts NORTH Z/R= 3
SUMMARY:H-34 MAIN / CALIBRATION RUN

CONFIGURATION FILE : DATA3 H34(III)/NoTail/**INACTIVE**
DATA FILE : TIP089:T:4

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 54.24996 in. = 4.52083 ft.
CHORD : 4.250004 in. = .354167 ft.
SOLIDITY : .099747

TAIL ROTOR NOT PRESENT

PROCESSING DATE :12 APRIL 1984
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001111 +.83798(Ct)^1.5 +95.883(Ct)^3

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-1.54	+1.41	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.44	+287.68	0.00000	0.000000	0.00000
3	0.000	+0.0	-.31	+.69	0.00000	0.000000	0.00000
4	0.000	+0.0	-.83	+.24	0.00000	0.000000	0.00000
5	.600	+.0	+2.67	+34.63	.00039	.001110	.00153
6	.600	+2.1	+62.74	+41.59	.00907	.001331	.14509
7	.600	+3.5	+139.55	+58.78	.02019	.001881	.34854
8	.601	+4.5	+192.49	+73.94	.02782	.002364	.43841
9	.601	+5.0	+221.97	+83.72	.03204	.002673	.47914
10	.601	+6.1	+293.01	+109.08	.04227	.003481	.55758
11	.601	+6.1	+287.75	+107.91	.04154	.003446	.54874
12	.600	+7.1	+352.11	+134.70	.05096	.004312	.59577
13	.601	+8.1	+416.24	+164.77	.06012	.005264	.62535
14	.601	+9.1	+489.43	+200.63	.07073	.006414	.65904
15	.602.	+9.5	+513.69	+214.31	.07399	.006828	.65824
16	.601	+9.3	+501.30	+208.01	.07235	.006641	.65446
17	.601	+9.1	+487.85	+208.54	.07037	.006399	.65154
18	.601	+8.8	+468.54	+189.74	.06769	.006063	.64865
19	.600	+8.5	+453.76	+182.42	.06577	.005848	.64407
20	.600	+8.3	+439.32	+174.64	.06370	.005601	.64097
21	.601	+8.1	+426.48	+168.37	.06152	.005373	.63431
22	.601	+7.8	+403.63	+157.63	.05827	.005034	.62405
23	.601	+7.5	+398.32	+149.98	.05827	.004767	.62528
24	.601	+7.3	+366.97	+140.64	.05334	.004497	.61169
25	.600	+7.1	+355.32	+135.66	.05145	.004345	.59981
26	.601	+6.6	+323.84	+128.81	.04678	.003960	.58534
27	.601	+6.6	+322.54	+128.75	.04657	.003957	.58199
28	.601	+5.4	+251.84	+94.22	.03637	.003010	.51464
29	.601	+3.6	+145.62	+60.59	.02102	.001934	.35181
30	.601	+1.6	+55.65	+41.08	.00802	.001310	.12249
31	0.000	+1.8	+.83	+.24	0.00000	0.000000	0.00000
32	0.000	+1.8	-1.04	+1.68	0.00000	0.000000	0.00000
33	0.000	+1.8	+1134.96	+288.16	0.00000	0.000000	0.00000
34	0.000	+1.8	+.32	+.12	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 70 DATE :10 NOVEMBER 1982 13:13 OAT= 49.5 BAROMETER= 30.408 WET BUL
B TEMP= 38.5 DRY BULB TEMP= 44.5
WIND CONDITIONS :LIGHT 0 to 3 VARIED R= .75
SUMMARY:3-76 BLADES WITH 60% TAPERED TIPS

CONFIGURATION FILE : DATA2 STATIONARY NoTail *INACTIVE*
DATA FILE : TIP070:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.099996 in. = .258333 ft.
SOLIDITY : .0704325

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000920 +.61271(Ct)^1.5 +286.892(Ct)^3

STANDARD DEVIATION = 5.86538E-15
MEAN ERROR = 1.17308E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-3.11	+1.02	0.00000	0.000093	0.00000
2	0.000	+0.0	+1134.16	+288.73	0.00000	0.000000	0.00000
3	0.000	+0.0	-.60	+.36	0.00000	0.000000	0.00000
4	0.000	+0.0	+.02	+.09	0.00000	0.000000	0.00000
5	.600	+.0	-5.69	+31.89	-.00109	.001308	.00516
6	.600	+2.1	+52.61	+35.37	.01008	.001452	.13089
7	.600	+4.0	+153.02	+52.14	.02933	.002140	.44046
8	.600	+5.1	+222.21	+69.48	.04254	.002849	.57808
9	.600	+6.1	+294.83	+90.78	.05652	.003727	.67665
10	.600	+7.1	+361.23	+116.13	.06927	.004769	.71742
11	.600	+8.0	+425.01	+142.99	.08148	.005870	.74358
12	.600	+9.0	+491.71	+175.39	.09434	.007205	.75466
13	.600	+9.5	+524.95	+195.07	.10072	.008014	.74847
14	.599	+9.5	+524.58	+194.11	.10094	.007998	.75245
15	.600	+9.3	+512.80	+186.76	.09832	.007668	.75455
16	.600	+9.0	+497.44	+177.76	.09538	.007298	.75740
17	.600	+8.8	+478.84	+168.82	.09166	.006920	.75258
18	.600	+8.5	+465.73	+161.56	.08923	.006628	.75467
19	.600	+8.3	+452.94	+155.59	.08677	.006382	.75152
20	.600	+8.1	+437.21	+148.66	.08386	.006106	.74641
21	.600	+7.8	+418.14	+139.33	.08007	.005713	.74426
22	.600	+7.5	+404.03	+132.91	.07739	.005451	.74114
23	.601	+7.3	+386.86	+125.40	.07399	.005136	.73938
24	.601	+7.0	+369.04	+118.78	.07059	.004865	.72445
25	.600	+6.7	+348.35	+111.06	.06668	.004553	.70981
26	.600	+6.4	+322.93	+101.97	.06179	.004178	.68989
27	.600	+8.4	+455.41	+156.78	.08720	.006425	.75214
28	.601	+8.7	+473.34	+165.52	.09054	.006780	.75413
29	.600	+9.5	+525.11	+193.45	.10067	.007941	.75480
30	.601	+.0	-4.23	+32.61	-.00081	.001336	.00323
31	0.000	+.0	-.02	+.09	0.00000	0.000000	0.00000
32	0.000	+.0	-2.48	+1.26	0.00000	0.000000	0.00000
33	0.000	+.0	+1134.12	+288.13	0.00000	0.000000	0.00000
34	0.000	+.0	-.64	+.18	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 71 DATE :10 NOVEMBER 1982 14:02 OAT= 51 BAROMETER= 30.392 WET BULB TE
MP= 40 DRY BULB TEMP= 50.5
WIND CONDITIONS :LIGHT GUSTS 0-3 - NORTH S/P= 1.2
SUMMARY:S-76 MAIN WITH 60 % TAPERED TIPS

CONFIGURATION FILE : DATA2 S76[[[]WEXT/NoTail/*INACTIVE*
DATA FILE : TIP071IT14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.099996 in. = .258333 ft.
SOLIDITY : .0704325

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000078 +.66972(Ct)^1.5 +293.836(Ct)^3

STANDARD DEVIATION = 1.87837E-15
MEAN ERROR = 3.91667E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-1.36	+1.05	0.00000	0.000000	0.00000
2	0.000	+0.0	+1135.24	+287.71	0.00000	0.000000	0.00000
3	0.000	+0.0	+.47	+.66	0.00000	0.000000	0.00000
4	0.000	+0.0	-.12	+.30	0.00000	0.000000	0.00000
5	.601	+.5	+3.79	+30.51	.00073	.001250	.00294
6	.600	+2.0	+44.57	+33.60	.00854	.001379	.10745
7	.600	+3.9	+144.42	+50.79	.02765	.002082	.41432
8	.601	+6.0	+274.41	+88.02	.05245	.003603	.62572
9	.601	+7.0	+350.53	+114.93	.06701	.004705	.69190
10	.601	+8.0	+409.16	+142.42	.07831	.005837	.70460
11	.601	+9.0	+476.67	+177.25	.09119	.007261	.71170
12	.600	+9.5	+501.90	+192.73	0.00000	0.000000	0.00000
13	.599	+9.5	+501.92	+193.21	0.00000	0.000000	0.00000
14	.601	+9.2	+493.64	+186.43	.09443	.007637	.71310
15	.600	+9.0	+476.49	+176.56	.09120	.007242	.71454
16	.600	+9.0	+473.19	+176.14	.09077	.007235	.70931
17	.600	+8.7	+456.78	+166.15	.08769	.006830	.71345
18	.601	+8.5	+449.68	+161.53	.08606	.006619	.71571
19	.600	+8.2	+428.94	+152.85	.08222	.006241	.70892
20	.600	+7.7	+395.29	+136.66	.07573	.005606	.69760
21	.600	+7.5	+380.12	+129.24	.07282	.005302	.69555
22	.599	+7.2	+356.09	+119.46	.06839	.004913	.68312
23	.600	+6.7	+332.28	+109.65	.06367	.004499	.67007
24	.600	+6.5	+311.89	+101.85	.05986	.004186	.65656
25	.601	+5.5	+246.67	+79.53	.04716	.003256	.59027
26	.600	+8.5	+441.53	+159.04	.08473	.006535	.70821
27	.600	+8.0	+414.48	+144.49	.07935	.005923	.70817
28	.601	+7.5	+387.75	+131.38	.07418	.005382	.70445
29	.600	+7.0	355.59	+117.72	.06808	.004827	.69070
30	.600	+7.2	+360.01	+121.50	.06897	.004985	.68194
31	0.000	+7.2	+.12	+.30	0.00000	0.000000	0.00000
32	0.000	+7.2	-1.36	+1.20	0.00000	0.000000	0.00000
33	0.000	+7.2	+1134.64	+288.13	0.00000	0.000000	0.00000
34	0.000	+7.2	-.13	+.24	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 72 DATE :10 NOVEMBER 1982 / 14:59 OAT= 50.5 BAROMETER= 30.39 WET BULB TEMP= 39.5 DRY BULB TEMP= 50.5
WIND CONDITIONS :LIGHT GUSTS / 0-3 / NORTH Z/R= 3
SUMMARY:9-76 MAIN WITH 60 % TAPERED TIPS

CONFIGURATION FILE : DATA2 976[[[]WEXT/NoTail/*INACTIVE*
DATA FILE : TIP072:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 56.04 in. = 4.67 ft.
  CHORD : 3.099996 in. = .258333 ft.
  SOLIDITY : .0704325

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000887 +.69339(Ct)^1.5 +293.700(Ct)^3

STANDARD DEVIATION = 2.51968E-15
MEAN ERROR = 6.11111E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-2.05	+1.34	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.45	+287.25	0.00000	0.000000	0.00000
3	0.000	+0.0	-.31	+1.13	0.00000	0.000000	0.00000
4	0.000	+0.0	-.31	+.02	0.00000	0.000000	0.00000
5	.551	+.0	+5.01	+26.18	.00114	.001275	.00566
6	.551	+2.4	+71.12	+33.50	.01617	.001631	.23657
7	.550	+4.0	+141.85	+48.47	.03233	.002365	.46113
8	.551	+5.1	+191.20	+62.69	.04352	.003056	.55755
9	.551	+6.0	+239.86	+78.98	.05459	.003845	.62248
10	.551	+7.1	+294.62	+100.74	.06706	.004910	.66371
11	.551	+8.1	+351.30	+125.64	.07986	.006116	.69246
12	.551	+9.1	+398.88	+151.69	.09079	.007393	.69438
13	.551	+9.6	+421.64	+166.12	0.00000	0.000000	0.00000
14	.551	+10.1	+445.64	+181.48	0.00000	0.000000	0.00000
15	.550	+10.1	+443.15	+180.73	0.00000	0.000000	0.00000
16	.551	+9.8	+432.15	+173.98	0.00000	0.000000	0.00000
17	.551	+9.6	+420.36	+166.60	0.00000	0.000000	0.00000
18	.551	+9.3	+407.84	+158.35	0.00000	0.000000	0.00000
19	.551	+9.1	+398.71	+151.90	.09058	.007389	.69232
20	.551	+8.8	+387.53	+145.15	.08804	.007061	.69426
21	.551	+8.5	+373.29	+138.43	.08482	.006736	.68831
22	.551	+8.3	+362.80	+131.61	.08237	.006399	.69335
23	.550	+8.1	+350.53	+125.70	.07988	.006134	.69070
24	.551	+7.8	+339.68	+120.21	.07716	.005849	.68768
25	.551	+7.5	+324.26	+113.76	.07357	.005527	.67755
26	.551	+8.5	+273.50	+92.43	.06227	.004505	.64731
27	.550	+8.7	+381.38	+141.58	.08694	.006912	.69594
28	.550	+8.4	+366.63	+134.10	.08363	.006550	.69287
29	0.000	+8.4	+.31	+.02	0.00000	0.000000	0.00000
30	0.000	+8.4	-1.67	+1.49	0.00000	0.000000	0.00000
31	0.000	+8.4	+1135.31	+288.18	0.00000	0.000000	0.00000
32	0.000	+8.4	+.30	+.28	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 73 DATE :10 NOVEMBER 1982 15:44 OAT= 50.5 BAROMETER= 30.4 WET BULB T
EMP= 39 DRY BULB TEMP= 50.5
WIND CONDITIONS :LIGHT GUSTS / 0-3 / NORTH Z/R= 3
SUMMARY:S-76 BLADES W/ 60 % TAPERED TIPS

CONFIGURATION FILE : DATA2 S76[[[]WEXT/NoTail *INACTIVE*
DATA FILE : TIP073:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.099996 in. = .258333 ft.
SOLIDITY : .0704325

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000899 +.66897(Ct)^1.5 +381.540(Ct)^3

STANDARD DEVIATION = 2.29129E-15
MEAN ERROR = 5.00000E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-1.87	+1.01	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.13	+288.21	0.00000	0.000000	0.00000
3	0.000	+0.0	-.63	+.17	0.00000	0.000000	0.00000
4	0.000	+0.0	-.62	+.08	0.00000	0.000000	0.00000
5	.600	+.1	+7.64	+30.95	.00146	.001270	.00828
6	.601	+2.0	+65.33	+37.25	.01249	.001525	.17176
7	.601	+4.0	+168.97	+58.04	.03229	.002375	.45840
8	.600	+6.1	+297.73	+98.98	.05699	.004053	.62997
9	.600	+7.0	+363.64	+125.94	.06965	.005166	.66780
10	.600	+8.0	+423.81	+155.86	.08114	.006389	.67879
11	.600	+8.6	+449.83	+171.79	0.00000	0.000000	0.00000
12	.600	+9.0	+482.40	+191.32	0.00000	0.000000	0.00000
13	.600	+9.0	+475.38	+188.95	0.00000	0.000000	0.00000
14	.601	+8.8	+469.79	+182.68	0.00000	0.000000	0.00000
15	.600	+8.3	+443.99	+167.11	.08500	.006850	.67884
16	.601	+7.9	+414.79	+150.64	.07928	.006165	.67946
17	.600	+7.5	+396.96	+142.15	.07607	.005833	.67502
18	.600	+7.3	+381.69	+134.43	.07304	.005508	.67246
19	.600	+6.8	+351.94	+120.72	.06737	.004948	.66313
20	.601	+6.5	+336.79	+114.85	.06442	.004672	.65678
21	.601	+6.3	+321.22	+107.97	.06145	.004423	.64631
22	.601	+8.3	+441.39	+166.09	.08436	.006798	.67648
23	.601	+8.8	+424.91	+156.10	.08121	.006380	.67981
24	.601	+7.7	+410.18	+148.15	.07846	.006068	.67966
25	.601	+7.4	+391.06	+139.39	.07475	.005705	.67222
26	.601	+7.2	+375.84	+132.15	.07182	.005407	.66792
27	.601	+6.9	+359.27	+124.35	.06869	.005091	.66356
28	.600	+5.6	+271.61	+89.19	.05199	.003655	.60852
29	.601	+5.1	+239.97	+78.66	.04589	.003221	.57275
30	.601	+.3	+13.73	+32.83	.00262	.001311	.01925
31	0.000	+.3	+.62	+.08	0.00000	0.000000	0.00000
32	0.000	+.3	-1.86	+1.31	0.00000	0.000000	0.00000
33	0.000	+.3	+1135.14	+288.39	0.00000	0.000000	0.00000
34	0.000	+.3	+.00	+.08	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 74 DATE :10 NOVEMBER 1982 OAT= 48.5 BAROMETER= 30.485 WET BULB TEMP= 38.5 DRY BULB TEMP= 48.5
WIND CONDITIONS :LIGHT GUSTS / 0-3 / NORTH Z/R= 3
SUMMARY:S-76 BLADES W/ 50 % TAPERED TIPS

CONFIGURATION FILE : DATA2 S76[[[]WEXT/NoTail/*INACTIVE*
DATA FILE : TIP074:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 56.04 in. = 4.67 ft.
  CHORD : 3.099996 in. = .258333 ft.
  SOLIDITY : .0764325

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000913 +.65288(Ct)^1.5 +498.196(Ct)^3

STANDARD DEVIATION = 5.012732E-15
MEAN ERROR = 1.15000E-15

Pt.	Tip Mθ	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-2.16	+.89	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.45	+286.86	0.00000	0.000000	0.00000
3	0.000	+0.0	-.30	+1.52	0.00000	0.000000	0.00000
4	0.000	+0.0	-.30	+.08	0.00000	0.000000	0.00000
5	.651	+.0	-1.64	+37.14	-.00027	.001294	.00063
6	.652	+2.1	+82.15	+44.92	.01335	.001563	.19520
7	.652	+4.0	+193.61	+67.61	.03142	.002349	.44484
8	.652	+5.1	+277.48	+91.50	.04508	.003183	.56426
9	.651	+6.1	+361.54	+122.41	.05880	.004263	.62763
10	.651	+7.1	+451.82	+163.62	.07350	.005700	.65610
11	.651	+8.4	+536.93	+214.34	0.00000	0.000000	0.00000
12	.651	+8.4	+542.10	+217.40	0.00000	0.000000	0.00000
13	.650	+8.3	+532.65	+210.44	0.00000	0.000000	0.00000
14	.651	+8.0	+514.83	+200.21	0.00000	0.000000	0.00000
15	.651	+7.8	+499.43	+190.75	.08121	.006641	.65386
16	.651	+7.6	+484.43	+181.63	.07875	.006322	.65593
17	.652	+7.3	+467.64	+172.92	.07599	.006017	.65332
18	.652	+7.0	+442.81	+159.39	.07187	.005539	.65269
19	.652	+6.7	+424.27	+149.87	.06886	.005209	.65099
20	.652	+6.5	+409.51	+143.15	.06645	.004974	.64627
21	.651	+6.4	+393.93	+137.15	.06409	.004778	.63725
22	.651	+5.5	+322.85	+108.38	.05254	.003774	.59881
23	.651	+4.5	+244.62	+81.65	.03978	.002843	.52365
24	.651	+7.1	+450.68	+162.99	.07329	.005675	.65601
25	.651	+7.4	+474.74	+175.63	.07725	.006120	.65844
26	.651	+7.7	+489.78	+185.50	.07977	.006470	.65355
27	.651	+8.0	+517.19	+201.62	0.00000	0.000000	0.00000
28	.652	+6.7	+424.77	+150.83	.06902	.005248	.64837
29	.651	+.0	+3.29	+37.92	.00054	.001320	.00176
30	0.000	+.0	+.30	+.08	0.00000	0.000000	0.00000
31	0.000	+.0	-2.04	+1.25	0.00000	0.000000	0.00000
32	0.000	+.0	+1135.69	+288.51	0.00000	0.000000	0.00000
33	0.000	+.0	+.29	+.14	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 75 DATE :11 NOVEMBER 1982 / 11:27 OAT= 51.5 BAROMETER= 30.311 WET BUL
B TEMP= 48.5 DRY BULB TEMP= 51.5
WIND CONDITIONS :GUSTY 0 to 3 Kts / SOUTH Z/R= 1.2
SUMMARY:H-34 BLADES W/ FUSELAGE :NO TAIL ROTOR ***** DIFFERS FROM TIP068 IN THAT
THE Z/R IS WRT S-70 BLADES W/OUT EXTENDERS *****

CONFIGURATION FILE : DATA5 H34[II].NoTail/**INACTIVE**
DATA FILE : TIP075:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 54.24996 in. = 4.52083 ft.
  CHORD : 4.250004 in. = .354167 ft.
  SOLIDITY : .099747

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001110 +.79495(Ct)^1.5 +187.675(Ct)^3

STANDARD DEVIATION = 1.53846E-15
MEAN ERROR = -3.07692E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-1.00	+1.05	0.00000	0.000000	0.00000
2	0.000	+0.0	+1133.56	+287.90	0.00000	0.000000	0.00000
3	0.000	+0.0	-1.20	+.57	0.00000	0.000000	0.00000
4	0.000	+0.0	+.07	+0.00	0.00000	0.000000	0.00000
5	.597	+0.0	+8.32	+33.59	.00122	.001087	.00873
6	.598	+2.0	+78.10	+43.64	.01141	.001411	.19305
7	.598	+3.0	+134.75	+55.75	.01970	.001803	.34249
8	.598	+4.0	+189.80	+71.11	.02775	.002300	.44890
9	.598	+5.1	+254.40	+92.23	.03721	.002984	.53722
10	.597	+5.1	+254.19	+91.72	.03719	.002968	.53961
11	.597	+6.0	+312.80	+113.67	.04577	.003679	.59438
12	.598	+7.0	+383.29	+142.91	.05597	.004616	.64063
13	.598	+8.1	+448.60	+174.56	.06560	.005647	.66445
14	.597	+9.0	+514.24	+208.56	.07547	.006770	.68386
15	.598	+9.0	+510.81	+208.32	.07471	.006740	.67665
16	.597	+8.8	+498.94	+199.78	.07311	.006475	.68178
17	.597	+8.6	+490.62	+194.83	.07181	.006308	.68129
18	.598	+8.3	+467.39	+183.40	.06827	.005926	.67228
19	.597	+8.0	+451.18	+175.69	.06605	.005690	.66633
20	.597	+7.7	+429.72	+165.59	.06287	.005359	.65698
21	.597	+7.3	+409.65	+154.31	.05998	.004998	.65642
22	.598	+7.0	+384.33	+144.02	.05616	.004655	.63847
23	.598	+6.7	+366.39	+135.59	.05352	.004381	.63116
24	.598	+6.4	+345.97	+126.60	.05049	.004086	.61995
25	.598	+6.1	+329.35	+119.67	.04812	.003868	.60955
26	.598	+5.8	+307.14	+111.12	.04490	.003593	.59129
27	.597	+5.3	+276.61	+100.32	.04047	.003246	.55999
28	.598	+3.5	+169.58	+65.47	.02477	.002116	.41136
29	.598	+2.5	+112.75	+51.77	.01648	.001673	.28228
30	.598	-.0	+9.37	+35.48	.00137	.001146	.00985
31	0.000	-.0	-.07	+0.00	0.00000	0.000000	0.00000
32	0.000	-.0	-1.17	+1.35	0.00000	0.000000	0.00000
33	0.000	-.0	+1133.31	+287.89	0.00000	0.000000	0.00000
34	0.000	-.0	-.59	+.45	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 76 DATE :12 NOVEMBER 1982 / 09143 OAT= 60.5 BAROMETER= 30.025 W BUL
B TEMP= 57.5 DRY BULB TEMP= 60.5
WIND CONDITIONS :GUSTY 0 to 3 kts/ SOUTHZ/R= 3
SUMMARY:H-34 CALIBRATION RUN

CONFIGURATION FILE : DATA5 H34[III]/NoTail/**INACTIVE**
DATA FILE : TIPOP5:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 54.24996 in. = 4.52083 ft.
  CHORD : 4.250004 in. = .354167 ft.
  SOLIDITY : .099747

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001127 +.84425(Ct)^1.5 +88.170(Ct)^3

STANDARD DEVIATION = 3.72322E-15
MEAN ERROR = 7.60000E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-2.55	+.61	0.00000	0.000000	0.00000
2	0.000	+0.0	+1133.27	+287.52	0.00000	0.000000	0.00000
3	0.000	+0.0	-1.49	+.85	0.00000	0.000000	0.00000
4	0.000	+0.0	-.25	+.25	0.00000	0.000000	0.00000
5	.600	-.1	+6.29	+34.42	.00092	.001117	.00560
6	0.000	-.1	+.25	+.25	0.00000	0.000000	0.00000
7	.600	+2.0	+68.18	+43.64	.01000	.001416	.15771
8	.600	+4.0	+178.63	+70.28	.02623	.002282	.41558
9	.600	+5.1	+241.47	+91.89	.03541	.002955	.50360
10	.600	+6.0	+296.53	+112.39	.04353	.003649	.55574
11	.600	+7.1	+369.60	+142.09	.05423	.004611	.61158
12	.600	+8.0	+430.43	+171.09	.06315	.005552	.63827
13	.599	+9.2	+507.40	+210.86	.07467	.006864	.66386
14	.599	+9.2	+501.89	+210.63	.07372	.006855	.65216
15	.598	+9.0	+492.00	+205.26	.07259	.006699	.65204
16	.599	+8.7	+476.48	+195.78	.07008	.006369	.65046
17	.600	+8.5	+461.85	+188.43	.06780	.006118	.64433
18	.600	+8.2	+446.02	+180.93	.06546	.005873	.63685
19	.600	+8.0	+430.48	+172.38	.06310	.005590	.63319
20	.600	+7.8	+413.68	+164.49	.06059	.005330	.62467
21	.600	+7.5	+397.07	+156.24	.05830	.005074	.61951
22	.600	+7.3	+380.66	+147.85	.05592	.004804	.61478
23	.601	+7.0	+368.75	+141.73	.05399	.004598	.61039
24	.600	+7.0	+370.29	+142.15	.05427	.004608	.61267
25	.600	+6.7	+346.12	+132.01	.05078	.004284	.59654
26	.600	+6.3	+323.18	+121.54	.04745	.003947	.58475
27	.600	+6.0	+302.66	+115.93	.04445	.003766	.55573
28	.600	+5.4	+276.09	+100.54	.03959	.003260	.53963
29	.600	+8.4	+458.99	+186.45	.06740	.006056	.64525
30	.600	+9.0	+493.33	+205.83	.07231	.006674	.65073
31	0.000	+9.0	+.06	+.24	0.00000	0.000000	0.00000
32	0.000	+9.0	+.14	+1.41	0.00000	0.000000	0.00000
33	0.000	+9.0	+1135.45	+288.16	0.00000	0.000000	0.00000
34	0.000	+9.0	+.06	+.18	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 77 DATE :15 NOVEMBER 1982/ 16:53 OAT= 42 BAROMETER= 30.125 WET BULB T
EMP= 34 DRY BULB TEMP= 42
WIND CONDITIONS :GUSTY 0 to 2 / NNW Z/R= 3
SUMMARY:S-76 BLADES W/ 20 Deg SWEEP ; 60% TAPER ; 20 Deg ANHEDRAL

CONFIGURATION FILE : DATA2 S76[[[]WEXT/NoTail/*INACTIVE*
DATA FILE : TIP077:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 56.04 in. = 4.67 ft.
  CHORD : 3.099996 in. = .258333 ft.
  SOLIDITY : .0704325

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000872 +.70758(Ct)^1.5 +210.975(Ct)^3

STANDARD DEVIATION = 5.89896E-15
MEAN ERROR = 1.31985E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-4.18	+1.41	0.00000	0.000000	0.00000
2	0.000	+0.0	+1133.73	+288.79	0.00000	0.000000	0.00000
3	0.000	+0.0	-1.03	+.42	0.00000	0.000000	0.00000
4	0.000	+0.0	-.25	+.36	0.00000	0.000000	0.00000
5	.550	+.1	-4.05	+25.87	-.00093	.001274	.00419
6	.551	+2.1	+48.14	+29.89	.01104	.001468	.14827
7	.551	+3.1	+75.77	+34.10	.01739	.001676	.25682
8	.551	+4.1	+113.89	+41.12	.02606	.002015	.39186
9	.550	+5.0	+152.89	+50.00	.03518	.002463	.50259
10	.551	+6.2	+189.01	+61.98	.04340	.003047	.55676
11	.551	+7.1	+234.81	+76.05	.05383	.003734	.62775
12	.550	+8.1	+278.74	+92.77	.06407	.004566	.66649
13	.551	+9.2	+328.46	+113.33	.07532	.005565	.69708
14	.550	+9.2	+319.45	+110.30	.07350	.005434	.68008
15	.551	+10.1	+371.45	+133.28	.08524	.006545	.71358
16	.551	+11.1	+415.27	+155.17	.09528	.007624	.72397
17	.551	+12.2	+467.75	+186.48	0.00000	0.000000	0.00000
18	.551	+12.6	+484.55	+198.00	0.00000	0.000000	0.00000
19	.550	+12.3	+476.85	+192.21	0.00000	0.000000	0.00000
20	.550	+12.5	+488.84	+201.57	0.00000	0.000000	0.00000
21	.551	+11.8	+456.03	+178.85	.10465	.008708	.72296
22	.551	+11.4	+440.86	+169.70	.10106	.008330	.72375
23	.551	+11.1	+420.55	+159.67	.09648	.007837	.71666
24	.550	+12.2	+467.82	+187.14	0.00000	0.000000	0.00000
25	.550	+10.8	+410.18	+154.30	.09419	.007587	.71500
26	.550	+10.4	+390.45	+142.36	.08969	.007002	.71986
27	.550	+9.8	+357.90	+127.86	.08220	.006288	.70332
28	.550	+9.5	+348.74	+121.98	.08013	.006001	.70927
29	.550	+10.3	+383.66	+139.68	.08830	.006884	.71526
30	.551	+6.6	+226.80	+73.65	.05202	.003617	.61549
31	0.000	+6.6	+.25	+.36	0.00000	0.000000	0.00000
32	0.000	+6.6	-3.56	+1.71	0.00000	0.000000	0.00000
33	0.000	+6.6	+1134.14	+287.90	0.00000	0.000000	0.00000
34	0.000	+6.6	+.25	+.48	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 78 DATE :15 NOVEMBER 1982 17:33 OAT= 41 BAROMETER= 30.152 WET BULB T
EMP= 33.5 DRY BULB TEMP= 41
WIND CONDITIONS :GUSTY 0 to 3 / NNW Z/R= 3
SUMMARY:8-76 BLADES W/ 20 Deg SWEEP ; 60% TAPER ; 20 Deg ANHEDRAL

CONFIGURATION FILE : DATA2 $76[[[]WEXT/NoTail/+INACTIVE+
DATA FILE : TIP076:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 56.04 in. = 4.67 ft.
  CHORD : 3.099996 in. = .258333 ft.
  SOLIDITY : .0704329

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000869 +.69202(Ct)^1.5 +234.885(Ct)^3

STANDARD DEVIATION = 1.92308E-15
MEAN ERROR = 3.84615E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-2.56	+.84	0.00000	0.000000	0.00000
2	0.000	+0.0	+1136.01	+298.62	0.00000	0.000000	0.00000
3	0.000	+0.0	+1.25	+.45	0.00000	0.000000	0.00000
4	0.000	+0.0	-.00	+.03	0.00000	0.000000	0.00000
5	.600	+.1	-4.47	+30.37	-.00086	.001258	.00379
6	.600	+2.1	+57.78	+34.85	.01116	.001441	.15350
7	.599	+4.1	+137.92	+49.25	.02670	.002041	.40098
8	.599	+6.1	+230.48	+73.41	.04461	.003043	.58111
9	.599	+7.1	+286.74	+92.11	.05549	.003817	.64267
10	.599	+8.1	+332.00	+110.15	.06427	.004566	.66965
11	.599	+9.1	+389.16	+132.75	.07532	.005502	.70509
12	.599	+10.1	+439.45	+157.90	.08512	.006550	.71160
13	.600	+10.6	+473.83	+173.51	.09144	.007170	.72368
14	.601	+10.9	+487.83	+181.34	.09387	.007484	.72112
15	.600	+11.1	+498.70	+189.60	.09624	.007835	.71910
16	.600	+11.7	+544.68	+213.07	.10519	.008811	.72661
17	.600	+11.3	+523.33	+202.32	.10099	.008361	.72039
18	.600	+10.9	+494.13	+185.42	.09543	.007668	.72144
19	.600	+10.5	+479.19	+176.57	.09255	.007303	.72355
20	.600	+10.2	+455.13	+164.20	.08780	.006783	.71973
21	.600	+9.6	+423.32	+149.26	.08171	.006169	.71050
22	.600	+8.6	+362.66	+122.73	.07004	.005075	.68537
23	.601	+7.6	+310.68	+101.75	.05982	.004196	.65431
24	.600	+6.6	+271.73	+86.50	.05242	.003573	.63036
25	.601	+5.6	+219.88	+71.31	.04237	.002943	.55621
26	.601	+5.2	+199.70	+65.46	.03839	.002695	.52381
27	.601	+4.7	+178.04	+59.22	.03427	.002441	.48778
28	.600	+3.5	+126.31	+47.15	.02440	.001950	.36666
29	.601	+9.5	+412.58	+142.90	.07957	.005901	.71375
30	.600	+10.4	+465.21	+169.10	.08996	.007002	.72313
31	0.000	+10.4	+.00	+.03	0.00000	0.000000	0.00000
32	0.000	+10.4	-3.19	+1.14	0.00000	0.000000	0.00000
33	0.000	+10.4	+1135.39	+298.16	0.00000	0.000000	0.00000
34	0.000	+10.4	-.00	+.06	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 79 DATE :15 NOV 1982 OAT= 41 BAROMETER= 30.170 WET BULB TEMP= 33.5 DR
Y BULB TEMP= 40.5
WIND CONDITIONS :LIGHT GUST=0 TO 3 FROM NNW Z/R= 3
SUMMARY:3-76 BLADES W/ 20 Deg SWEEP ; 40% TAPER ; 20 Deg ANHEDRAL

CONFIGURATION FILE : DATA2 $76[[[[WENT/NoTa[[/*INACTIVE*
DATA FILE : TIP079:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 56.04 in. = 4.67 ft.
  CHORD : 3.099996 in. = .258333 ft.
  SOLIDITY : .0784325

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000882 +.66884(Ct)^1.5 +313.657(Ct)^3

STANDARD DEVIATION = 9.23077E-16
MEAN ERROR = -1.84615E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-2.93	+.74	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.90	+288.72	0.00000	0.000000	0.00000
3	0.000	+0.0	+.14	+.35	0.00000	0.000000	0.00000
4	0.000	+0.0	-.12	+.02	0.00000	0.000000	0.00000
5	.649	+.0	-2.86	+35.58	-.00034	.001256	.00093
6	.650	+2.0	+68.92	+41.25	.01133	.001452	.15585
7	.651	+3.1	+114.11	+48.81	.01874	.001716	.28045
8	.650	+4.1	+166.74	+59.14	.02741	.002082	.40909
9	.651	+5.0	+219.79	+72.10	.03609	.002535	.50754
10	.651	+6.0	+272.51	+88.13	.04471	.003096	.57300
11	.650	+7.1	+339.97	+111.05	.05584	.003906	.63398
12	.650	+8.1	+399.91	+132.21	.06585	.004662	.68024
13	.651	+9.1	+461.72	+160.51	.07567	.005633	.69346
14	.650	+10.1	+533.01	+195.08	.08777	.006879	.70937
15	.650	+10.5	+553.57	+208.20	.09118	.007343	.70360
16	.649	+10.5	+556.68	+211.02	.09174	.007447	.70026
17	.650	+10.0	+529.46	+194.48	.08718	.006851	.70410
18	.649	+9.8	+515.81	+186.86	.08506	.006598	.70552
19	.650	+9.5	+499.89	+177.59	.08213	.006247	.70696
20	.650	+9.1	+480.65	+168.97	.07906	.005951	.70092
21	.650	+8.8	+452.52	+157.36	.07433	.005535	.68707
22	.650	+8.5	+435.44	+148.06	.07164	.005216	.68985
23	.651	+8.3	+430.41	+145.39	.07069	.005113	.68979
24	.650	+7.9	+405.73	+136.71	.06666	.004818	.67150
25	.650	+7.5	+375.62	+124.77	.06178	.004394	.65575
26	.650	+7.1	+350.38	+112.91	.05767	.003980	.65306
27	.650	+6.8	+339.1[illegible]	+110.00	.05576	.003872	.63805
28	.651	+8.6	+439.[illegible]6	+149.23	.07198	.005241	.69148
29	.650	+9.1	+472.45	+164.08	.07779	.005785	.70380
30	.650	+7.9	+398.64	+132.21	.06549	.004651	.67623
31	0.000	+7.9	+.12	+.02	0.00000	0.000000	0.00000
32	0.000	+7.9	-2.93	+.89	0.00000	0.000000	0.00000
33	0.000	+7.9	+1134.87	+288.24	0.00000	0.000000	0.00000
34	0.000	+7.9	+.11	+.05	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 80 DATE :15 NOVEMBER 1982 OAT= 40 BAROMETER= 30.2 WET BULB TEMP= 33 D
RY BULB TEMP= 39
WIND CONDITIONS :LIGHT GUSTS 0-3 FROM NNW Z/R= 3
SUMMARY:6-76 BLADES W/ 20 Deg SWEEP | 60% TAPER | 20 Deg ANHEDRAL *-**** REPEAT O
F TIP077 *****

CONFIGURATION FILE : DATA2 S76CIIIWEXT/NoTail/*INACTIVE*
DATA FILE : TIP080:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.099996 in. = .258333 ft.
SOLIDITY : .0704325

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000861 +.69329(Ct)^1.5 +225.705(Ct)^3

STANDARD DEVIATION = 7.854536E-16
MEAN ERROR = -1.44000E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-3.19	+.84	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.13	+298.58	0.00000	0.000000	0.00000
3	0.000	+0.0	-.64	+.21	0.00000	0.000000	0.00000
4	0.000	+0.0	-.00	+.38	0.00000	0.000000	0.00000
5	.551	+.0	-2.27	+25.72	-.00052	.001259	.00176
6	.551	+2.1	+49.62	+29.18	.01136	.001431	.15888
7	.551	+3.1	+79.22	+33.59	.01814	.001647	.27839
8	.551	+4.1	+112.14	+39.92	.02567	.001957	.39438
9	.551	+5.2	+154.59	+51.03	.03534	.002498	.49912
10	.551	+6.1	+192.42	+61.05	.04399	.002989	.57926
11	.551	+7.2	+242.37	+76.30	.05540	.003735	.65520
12	.551	+7.2	+238.73	+76.45	.05456	.003741	.63920
13	.551	+8.1	+282.33	+91.79	.06463	.004499	.68528
14	.551	+9.1	+320.21	+108.69	.07336	.005332	.69930
15	.550	+10.2	+373.85	+133.87	.08561	.006579	.71453
16	.551	+11.2	+423.69	+158.46	.09706	.007773	.73002
17	.551	+11.0	+415.52	+154.44	.09512	.007570	.72721
18	.552	+10.8	+409.01	+150.38	.09334	.007349	.72819
19	.550	+10.4	+390.16	+141.44	.08945	.006944	.72303
20	.549	+10.1	+379.19	+135.65	.08738	.006693	.72416
21	.551	+9.7	+357.36	+125.26	.08178	.006138	.71500
22	.551	+9.3	+336.26	+116.17	.07686	.005686	.70331
23	.551	+9.0	+320.30	+109.53	.07338	.005368	.69385
24	.550	+8.6	+305.15	+102.36	.07013	.005037	.69191
25	.551	+7.9	+276.97	+92.27	0.00000	0.000000	0.00000
26	.550	+9.6	+348.56	+121.39	.08005	.005970	.71200
27	.550	+9.2	+331.19	+113.28	.07593	.005561	.70599
28	.550	+9.2	+325.83	+112.74	.07470	.005535	.69225
29	.550	+10.6	+394.82	+144.23	.09057	.007085	.72196
30	.549	+.0	+.34	+26.11	.00008	.001289	.00010
31	0.000	+.0	+.00	+.38	0.00000	0.000000	0.00000
32	0.000	+.0	-3.19	+.99	0.00000	0.000000	0.00000
33	0.000	+.0	+1134.26	+298.40	0.00000	0.000000	0.00000
34	0.000	+.0	+.00	+.69	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 81 DATE :15 NOVEMBER 1982 - 19:33 OAT= 38.5 BAROMETER= 30.23 WET BULB TEMP= 33 DRY BULB TEMP= 38.5
WIND CONDITIONS :LIGHT GUSTS 0-3 FROM NNW Z/R= 1.2
SUMMARY:S-76 BLADES W/ 20 Deg SWEEP ; 60% TAPER ; 20 Deg ANHEDRAL

CONFIGURATION FILE : DATA2 S76[[[]WEXT/NoTail/*INACTIVE*
DATA FILE : TIP081:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.099996 in. = .258333 ft.
SOLIDITY : .0704329

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000059 +.69736(Ct)^1.5 +183.345(Ct)^3

STANDARD DEVIATION = 4.500000E-15
MEAN ERROR = 9.000000E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-3.81	+.71	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.01	+287.67	0.00000	0.000000	0.00000
3	0.000	+0.0	-.74	+.71	0.00000	0.000000	0.00000
4	0.000	+0.0	-.62	+.05	0.00000	0.000000	0.00000
5	.601	-.0	+1.74	+30.31	.00033	.001240	.00092
6	.601	+2.1	+62.92	+35.47	.01207	.001457	.17079
7	.601	+3.1	+105.87	+42.53	.02037	.001752	.31137
8	.601	+4.1	+147.68	+51.29	.02836	.002110	.42493
9	.601	+5.1	+192.97	+62.49	.03706	.002570	.52095
10	.600	+6.1	+243.20	+77.35	.04682	.003189	.59617
11	.600	+7.2	+305.07	+97.92	.05883	.004043	.66225
12	.600	+8.1	+351.26	+115.27	.06764	.004753	.69451
13	.600	+9.4	+416.35	+143.10	.08025	.005906	.72229
14	.599	+10.2	+464.48	+165.86	.08977	.006865	.73534
15	.599	+11.0	+520.19	+194.05	.10064	.008040	.74528
16	.599	+11.0	+523.36	+196.25	.10115	.008122	.74334
17	.600	+10.8	+512.58	+190.12	.09896	.007868	.74326
18	.600	+10.5	+502.69	+185.98	.09708	.007698	.73805
19	.600	+10.2	+487.56	+176.76	.09393	.007292	.74094
20	.599	+10.1	+476.57	+171.81	.09212	.007111	.73780
21	.600	+10.0	+476.25	+170.49	.09193	.007047	.74227
22	.601	+9.8	+464.15	+164.93	.08929	.006794	.73698
23	.601	+9.6	+451.57	+158.98	.08689	.006547	.73415
24	.602	+9.3	+438.68	+152.62	.08464	.006262	.73811
25	.601	+8.9	+407.85	+139.62	.07925	.005736	.71608
26	.601	+8.3	+378.65	+127.19	.07269	.005229	.70339
27	.601	+7.9	+355.93	+116.20	.06831	.004776	.70159
28	.600	+6.7	+290.94	+93.42	.05601	.003851	.64598
29	.600	+5.5	+231.24	+73.75	.04455	.003043	.57998
30	.600	+4.6	+176.18	+58.80	.03393	.002425	.48368
31	0.000	+4.6	+.62	+.05	0.00000	0.000000	0.00000
32	0.000	+4.6	-3.19	+.92	0.00000	0.000000	0.00000
33	0.000	+4.6	+1135.14	+298.18	0.00000	0.000000	0.00000
34	0.000	+4.6	+.63	+.23	0.00000	0.000000	0.00000

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 82 DATE :15 NOVEMBER 1982 - 20:12 OAT= 37.5 BAROMETER= 30.233 WET BUL
B TEMP= 31.7 DRY BULB TEMP= 37.5
WIND CONDITIONS :LIGHT GUSTS 0-3 FROM NNW Z/R= .75
SUMMARY:3-76 BLADES W/ 20 Deg SWEEP : 60% TAPER : 20 Deg ANHEDRAL IGE

CONFIGURATION FILE : DATA2 $76[[[]WEKT/NoTail/*INACTIVE*
DATA FILE : TIP082:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.000996 in. = .250333 ft.
SOLIDITY : .0704329

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000093 +.62461(Ct)^1.5 +212.826(Ct)^3

STANDARD DEVIATION = 1.93739E-15
MEAN ERROR = -4.13043E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-4.15	+.57	0.00000	0.000000	0.00000
2	0.000	+0.0	+1133.80	+287.77	0.00000	0.000000	0.00000
3	0.000	+0.0	-.95	+.60	0.00000	0.000000	0.00000
4	0.000	+0.0	-.31	+.12	0.00000	0.000000	0.00000
5	.601	-.0	+6.75	+30.70	.00130	.001262	.00694
6	.602	+2.0	+62.37	+35.93	.01196	.001475	.16637
7	.602	+3.2	+114.40	+44.51	.02194	.001828	.33363
8	.601	+4.1	+154.25	+51.95	.02962	.002137	.44783
9	.601	+5.2	+213.40	+65.85	.04098	.002708	.57493
10	.601	+6.0	+254.05	+77.08	.04884	.003173	.63840
11	.600	+7.1	+315.99	+97.12	.06086	.004005	.70338
12	.600	+8.1	+373.27	+117.77	.07195	.004861	.74503
13	.600	+9.1	+430.46	+140.97	.08287	.005811	.77033
14	.600	+10.1	+484.05	+166.34	.09345	.006876	.77960
15	.599	+10.6	+515.99	+181.88	.09989	.007540	.78577
16	.601	+11.2	+550.62	+205.71	0.00000	0.000000	0.00000
17	.600	+11.2	+562.48	+206.04	0.00000	0.000000	0.00000
18	.600	+11.1	+554.96	+203.85	0.00000	0.000000	0.00000
19	.600	+10.8	+542.93	+196.47	.10453	.008100	.78302
20	.600	+10.6	+531.26	+190.11	.10232	.007841	.78340
21	.601	+10.2	+510.01	+178.64	.09807	.007356	.78353
22	.600	+10.0	+500.03	+172.49	.09627	.007111	.78328
23	.601	+9.8	+488.15	+167.81	.09384	.006908	.78097
24	.600	+10.2	+504.61	+175.52	.09722	.007241	.78558
25	.602	+9.5	+469.99	+158.65	.09013	.006515	.77941
26	.601	+9.8	+428.40	+146.46	.08236	.005782	.76705
27	.601	+9.1	+392.35	+135.82	.07538	.005176	.75031
28	.601	+10.1	+496.50	+172.31	.09550	.007097	.78036
29	.601	+5.5	+247.45	+75.24	.04754	.003096	.62841
30	.601	-.0	+3.21	+31.36	.00062	.001289	.00223
31	0.000	-.0	+.31	+.12	0.00000	0.000000	0.00000
32	0.000	-.0	-4.15	+.87	0.00000	0.000000	0.00000
33	0.000	-.0	+1135.21	+288.10	0.00000	0.000000	0.00000
34	0.000	-.0	+.31	+.15	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 83 DATE :17 NOVEMBER 1982 , 17:24 OAT= 35 BAROMETER= 30 WET BULB TEMP
= 33 DRY BULB TEMP= 35
WIND CONDITIONS :ZERO Z/R= .75
SUMMARY::ISOLATED TAIL ROTOR PUSHER CONFIGURATION FIRST RUN W/ TAIL ROTOR

CONFIGURATION FILE : DATA7 $76[11]WEXT/WTail/*INACTIVE*
DATA FILE : TIP083:T:4

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.099996 in. = .258333 ft.
SOLIDITY : .0704325

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

***********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0004185 +.89523(Ct)^1.5 +100.825(Ct)^3

STANDARD DEVIATION = 5.13231E-14
MEAN ERROR = -1.14762E-14

Pt.	Tip #	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-.24	+.28	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.97	+259.46	0.00000	0.000000	0.00000
3	0.000	+0.0	-.30	+.27	0.00000	0.000000	0.00000
4	0.000	+0.0	-.05	+.09	0.00000	0.000000	0.00000
5	.547	-.7	+.97	+1.03	.00168	.001969	.01230
6	.551	+.9	+1.85	+1.13	.00318	.002032	.02934
7	.550	+3.6	+7.24	+1.51	.01253	.002726	.17115
8	.548	+5.9	+12.94	+2.12	.02253	.003854	.29195
9	.549	+8.6	+21.05	+3.03	.03647	.005474	.42330
10	.548	+10.9	+29.52	+4.29	.05136	.007792	.49713
11	.549	+13.6	+39.54	+6.33	.06862	.011466	.52164
12	.550	+16.0	+50.93	+9.00	.08794	.016220	.53497
13	.550	+14.7	+46.05	+7.79	.07957	.014038	.53205
14	.550	+13.3	+45.37	+7.34	.07843	.013244	.55179
15	.548	+11.9	+38.91	+5.90	.06778	.010718	.54777
16	.550	+11.1	+32.87	+4.58	.05672	.008250	.54489
17	.551	+9.5	+32.05	+4.47	.05517	.008029	.53697
18	.550	+8.3	+26.55	+3.46	.04582	.006225	.52425
19	.547	+6.9	+22.58	+3.07	.03944	.005594	.46597
20	.550	+7.0	+22.88	+2.97	.03956	.005357	.48867
21	.551	+4.5	+16.50	+2.02	.02843	.003626	.44001
22	.553	+2.8	+12.55	+1.79	.02149	.003203	.32726
23	.550	+2.8	+12.09	+1.65	.02087	.002977	.33709
24	.548	+2.2	?7.92	+1.34	.01378	.002432	.22117
25	.550	-.6	+2.20	+1.06	.00380	.001904	.04089
26	0.000	-.6	+.05	+.09	0.00000	0.000000	0.00000
27	0.000	-.6	-.24	+.28	0.00000	0.000000	0.00000
29	0.000	-.6	-564.97	+259.65	0.00000	0.000000	0.00000
29	0.000	-.6	-.05	+.05	0.00000	0.000000	0.00000

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EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 94   DATE :17 NOVEMBER 1982   19:00   OAT= 38 BAROMETER= 30.242 WET BULB
TEMP= 35 DRY BULB TEMP= 38
WIND CONDITIONS :ZERO   Z/R= .75
SUMMARY:ISOLATED TAIL ROTOR - PUSHER CONFIGURATION

CONFIGURATION FILE : DATA7 $78[II]WEXT/WTail/*INACTIVE*
DATA FILE : TIPU84:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
    RADIUS : 56.04 in. = 4.67 ft.
    CHORD : 3.099996 in. = .258333 ft.
    SOLIDITY : .0704325

TAIL BLADE PROPERTIES :
    RADIUS : 11.499996 in. = .958333 ft.
    CHORD : 2.000004 in. = .166667 ft.
    SOLIDITY : .221433

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

************TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0004218 +.92459(Ct)^1.5 +90.661(Ct)^3

STANDARD DEVIATION = 5.20888E-14
MEAN ERROR = -1.19500E-14

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-.26	+.23	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.53	+259.28	0.00000	0.000000	0.00000
3	0.000	+0.0	+.13	+.08	0.00000	0.000000	0.00000
4	0.000	+0.0	-.03	+.06	0.00000	0.000000	0.00000
5	.602	-3.3	+.47	+1.18	.00067	.001772	.00328
6	.601	+1.7	+2.55	+1.30	.00368	.001965	.03787
7	.601	+4.2	+8.74	+1.80	.01265	.002725	.17368
8	.599	+4.1	+15.61	+2.35	.02275	.003574	.31952
9	.599	+9.0	+23.91	+3.49	.03488	.005310	.40823
10	.598	+11.7	+35.66	+5.08	.05208	.007739	.51105
11	.598	+14.1	+46.78	+7.09	.06842	.010817	.55046
12	.597	+14.1	+46.74	+7.39	.06848	.011380	.52767
13	.598	+16.0	+55.38	+9.73	.08089	.014822	.51642
14	.599	+11.0	+56.08	+9.24	.08159	.014030	.55267
15	.598	+10.1	+39.52	+5.75	.05769	.008762	.52625
16	.599	+9.5	+38.60	+5.46	.05630	.008304	.53525
17	.600	+8.3	+26.50	+3.69	.03848	.005594	.44892
18	.598	+7.1	+25.45	+3.32	.03718	.005055	.47188
19	.599	+5.0	+19.49	+2.70	.02839	.004096	.38855
20	.598	+3.1	+13.78	+1.98	.02013	.003024	.31431
21	.598	+1.8	+10.15	+1.63	.01486	.002486	.24241
22	.598	+.7	+7.55	+1.56	.01101	.002379	.16164
23	.599	-.7	+4.08	+1.46	.00594	.002223	.06859
24	.598	-2.3	+1.15	!1.27	.00169	.001943	.01188
25	0.000	-2.3	+.03	+.06	0.00000	0.000000	0.00000
26	0.000	-2.3	-.26	+.24	0.00000	0.000000	0.00000
27	0.000	-2.3	-564.53	+259.18	0.00000	0.000000	0.00000
28	0.000	-2.3	+.13	+.04	0.00000	0.000000	0.00000

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EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 85   DATE :18 NOVEMBER 1982   10:00   OAT= 43.5 BAROMETER= 30.--F WET BULB TEMP= 39.5 DRY BULB TEMP= 49.5
WIND CONDITIONS :LIGHT 0 to 3 kts NNE   Z/R= 3
SUMMARY:ISOLATED TAIL ROTOR / PUSH CONFIGURATION

CONFIGURATION FILE : DATA7 $T6C[1]WEXT.WTail =: INACTIVE=
DATA FILE : TIP085:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.099996 in. = .258333 ft.
SOLIDITY : .0704325

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :17 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0003766 +.94821(Ct)^1.5 +57.481(Ct)^3

STANDARD DEVIATION = 8.01715E-14
MEAN ERROR = -1.94444E-14

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-.46	+1.20	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.46	+259.32	0.00000	0.000000	0.00000
3	0.000	+0.0	+.21	+.13	0.00000	0.000000	0.00000
4	0.000	+0.0	-.00	+.02	0.00000	0.000000	0.00000
5	.547	-.0	+.10	+.80	.00018	.001595	.00048
6	.548	+4.7	+2.96	+1.04	.00513	.001883	.06500
7	.550	+7.2	+8.26	+1.54	.01422	.002766	.20393
8	.550	+9.8	+15.24	+2.27	.02624	.004076	.34700
9	.550	+12.5	+23.90	+3.15	.04111	.005654	.49060
10	.550	+14.9	+31.98	+4.55	.05503	.008181	.52501
11	.548	+16.9	+40.27	+5.97	.06996	.010827	.56862
12	.547	+19.4	+47.66	+8.03	.08291	.014584	.54471
13	.549	+20.6	+52.03	+8.79	.08978	.015819	.56582
14	.549	+17 9	+46.77	+7.04	.08085	.012698	.60238
15	.551	+15.7	+38.47	+5.61	.06590	.010028	.56137
16	.551	+12.9	+28.90	+3.84	.04953	.006878	.53337
17	.550	+10.6	+21.91	+2.68	.03760	.004805	.50660
18	.548	+8.1	+15.50	+2.03	.02687	.003369	.39952
19	.550	+5.6	+10.02	+1.54	.01726	.002778	.27159
20	.549	+3.0	+4.99	+1.10	.00862	.001984	.13423
21	.550	+.8	+1.02	+.83	.00176	.001489	.01651
22	.550	-.6	+.49	+.93	.00085	.001671	.00494
23	0.000	-.6	+.00	+.02	0.00000	0.000000	0.00000
24	0.000	-.6	-.61	+1.24	0.00000	0.000000	0.00000
25	0.000	-.6	-564.58	+259.43	0.00000	0.000000	0.00000
26	0.000	-.6	+.00	+.02	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN #.: 05 DATE :10 NOVEMBER 1982 / 10:30 OAT= 44 BAROMETER= 30.44 WET BULB T
EMP= 40 DRY BULB TEMP= 44
WIND CONDITIONS :GUSTY 0 to 3 kts / NNEZ/R= 3
SUMMARY:ISOLATED TAIL ROTOR / PUSH CONFIGURATION

CONFIGURATION FILE : DATA? 876[[[]WEXT/WTail/*INACTIVE*
DATA FILE : TIP06A:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.099996 in. = .259333 ft.
SOLIDITY : .0704325

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0003915 +1.02277(Ct)^1.5 +25.856(Ct)^3

STANDARD DEVIATION = 6.39629E-14
MEAN ERROR = -1.58526E-14

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-.61	+1.30	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.57	+259.40	0.00000	0.000000	0.00000
3	0.000	+0.0	+.18	+.20	0.00000	0.000000	0.00000
4	0.000	+0.0	+.10	+.05	0.00000	0.000000	0.00000
5	.598	-.0	+.20	+1.10	.00029	.001671	.00100
6	.597	+3.3	+.82	+1.17	.00120	.001781	.00777
7	.600	+5.5	+3.15	+1.26	.00456	.001901	.05387
8	.598	+8.1	+9.41	+1.73	.01373	.002639	.20272
9	.600	+8.1	+8.93	+1.74	.01295	.002630	.19646
10	.598	+10.1	+15.03	+2.29	.02193	.003467	.30984
11	.599	+13.0	+26.30	+3.75	.03816	.005676	.43695
12	.599	+15.6	+35.92	+5.16	.05214	.007943	.50514
13	.598	+18.0	+48.63	+7.71	.07091	.011727	.53573
14	.597	+18.0	+48.81	+7.29	.07145	.011136	.57067
15	.599	+18.9	+53.20	+8.29	.07719	.012559	.56821
16	.598	+16.5	+45.64	+6.87	.06654	.010452	.54641
17	.598	+13.6	+32.71	+4.36	.04769	.006633	.52241
18	.600	+11.0	+26.24	+3.45	.03800	.005214	.47278
19	.598	+8.0	+23.80	+3.19	.03465	.004845	.44299
20	.600	+6.3	+14.64	+1.99	.02122	.003004	.34234
21	.598	+4.0	+7.89	+1.64	.01150	.002495	.16444
22	.598	+1.2	+1.50	+1.24	.00219	.001888	.01808
23	.598	+.1	+.78	+1.09	.00113	.001652	.00765
24	0.000	+.1	-.10	+.05	0.00000	0.000000	0.00000
25	0.000	+.1	-.82	+1.27	0.00000	0.000000	0.00000
26	0.000	+.1	-564.82	+259.33	0.00000	0.000000	0.00000
27	0.000	+.1	-.00	+.04	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 87 DATE :19 NOVEMBER 1982 / 11:00 OAT= 47 BAROMETER= 30.43 WET BULB T
EMP= 41 DRY BULB TEMP= 46
WIND CONDITIONS :GUSTY 0 to 3 kts / NNEZ/R= 3
SUMMARY:ISOLATED TAIL ROTOR / PUSH CONFIGURATION

CONFIGURATION FILE : DATA7 S78[III]WEXT/WTail/*INACTIVE*
DATA FILE : TIP087:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 56.04 in. = 4.67 ft.
  CHORD : 3.099996 in. = .258333 ft.
  SOLIDITY : .0704329

TAIL BLADE PROPERTIES :
  RADIUS : 11.499996 in. = .958333 ft.
  CHORD : 2.000004 in. = .166667 ft.
  SOLIDITY : .221433

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cqm= +.0003591 +1.01283(Ct)^1.5 +34.241(Ct)^3

STANDARD DEVIATION = 1.96070E-14
MEAN ERROR = -5.06250E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-.72	+1.16	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.62	+259.15	0.00000	0.000000	0.00000
3	0.000	+0.0	+.05	+.04	0.00000	0.000000	0.00000
4	0.000	+0.0	+.10	+.04	0.00000	0.000000	0.00000
5	.650	+.0	+.14	+1.23	.00017	.001577	.00847
6	.650	+2.9	+.63	+1.27	.00078	.001639	.00442
7	.650	+3.4	+2.67	+1.41	.00330	.001821	.03457
8	.651	+7.9	+9.41	+1.93	.01157	.002473	.16747
9	.648	+10.5	+18.08	+2.61	.02240	.003372	.33090
10	.649	+12.9	+28.84	+3.83	.03573	.004946	.45438
11	.650	+15.2	+40.81	+5.61	.04935	.007221	.50514
12	.648	+17.9	+53.35	+8.05	.06615	.010410	.54390
13	.650	+16.3	+50.43	+7.00	.06226	.009121	.56678
14	.650	+13.3	+39.02	+5.37	.04813	.006906	.50878
15	.648	+10.8	+29.56	+3.79	.03670	.004908	.47663
16	.650	+8.5	+26.07	+3.34	.03220	.004305	.44663
17	.648	+5.9	+15.99	+2.30	.01984	.002979	.31226
18	.650	+3.6	+8.87	+1.52	.01095	.001953	.19522
19	.651	+1.1	+1.78	+1.31	.00209	.001677	.01902
20	.651	+.0	+.88	+1.17	.00108	.001503	.00791
21	0.000	+.0	-.10	+.04	0.00000	0.000000	0.00000
22	0.000	+.0	-.72	+1.16	0.00000	0.000000	0.00000
23	0.000	+.0	-564.61	+259.12	0.00000	0.000000	0.00000
24	0.000	+.0	-.10	+.09	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN #: 98 DATE :18 NOVEMBER 1982 / 11:22 OAT= 47 BAROMETER= 30.43 WET BULB T
EMP= 41 DRY BULB TEMP= 46
WIND CONDITIONS :GUSTY 0 to 3 kts / -NNEZ/R= 3
SUMMARY:S-76 BLADES W/ 20 Deg SWEEP ; 60% TAPER & 20 Deg ANHEDRAL TIPS / TAIL RO
TOR IN PUSHER CONFIGURATION

CONFIGURATION FILE : DATA7 S76IIIiwEXT.wTail *INACTIVE*
DATA FILE : TIP098:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :-
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.099996 in. = .258333 ft.
SOLIDITY : .0704325

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000872 +.72877(Ct)^1.5 +209.198(Ct)^3

STANDARD DEVIATION = 2.54654E-19
MEAN ERROR = 9.62500E-16

Pt.	Tip Mn	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-6.31	+1.08	0.00000	0.000000	0.00000
2	0.000	+0.0	+1133.51	+287.35	0.00000	0.000000	0.00000
3	0.000	+0.0	-1.25	+1.02	0.00000	0.000000	0.00000
4	0.000	+0.0	+.00	+.24	0.00000	0.000000	0.00000
5	.551	+.1	+4.58	+25.57	.00104	.001246	.00507
6	.551	+2.0	+46.51	+29.36	.01058	.001430	.14284
7	.551	+4.0	+110.12	+41.60	.02502	.002024	.36697
8	.550	+6.0	+189.50	+62.62	.04317	.003054	.55104
9	.551	+8.2	+275.76	+94.43	.06277	.004603	.64117
10	.550	+10.2	+376.60	+137.03	.08587	.006690	.70582
11	.549	+12.1	+465.95	+188.24	.10650	.009213	.70795
12	.550	+12.7	+487.63	+201.86	.11116	.009853	.70582
13	0.000	+12.7	-.00	+.24	0.00000	0.000000	0.00000
14	0.000	+12.7	-5.69	+1.29	0.00000	0.000000	0.00000
15	0.000	+12.7	+1134.13	+298.34	0.00000	0.000000	0.00000
16	0.000	+12.7	-.00	+.12	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0003321 +1.61345(Ct)^1.5 -107.836(Ct)^3

STANDARD DEVIATION = 8.92941E-15
MEAN ERROR = -3.37500E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-.15	+1.20	0.00000	0.000000	0.00000
2	0.000	+0.0	-964.41	+259.18	0.00000	0.000000	0.00000
3	0.000	+0.0	+.26	+.01	0.00000	0.000000	0.00000
4	0.000	+0.0	-.01	+.03	0.00000	0.000000	0.00000
5	.550	-.8	+3.92	+1.15	.00675	.002074	.00889
6	.551	-1.7	+4.67	+1.13	.00801	.002025	.11781
7	.550	-.9	+6.98	+1.38	.01202	.002472	.17742
8	.550	+5.2	+14.14	+2.32	.02434	.004166	.30335
9	.552	+6.7	+19.38	+3.24	.03313	.005772	.34757
10	.549	+9.2	+26.63	+4.75	.04607	.008573	.36360
11	.551	+11.9	+35.39	+6.73	.06071	.012053	.41294
12	.550	+12.7	+37.38	+6.77	.06433	.012155	.44668
13	0.000	+12.7	+.01	+.03	0.00000	0.000000	0.00000
14	0.000	+12.7	-.36	+1.15	0.00000	0.000000	0.00000
15	0.000	+12.7	-964.38	+259.14	0.00000	0.000000	0.00000
16	0.000	+12.7	+.05	+.00	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 89 DATE :18 NOVEMBER 1982 / 13:07 OAT= 52 BAROMETER= 30.409 WET BULB TEMP= 43.5 DRY BULB TEMP= 50
WIND CONDITIONS :LIGHT 0 to 3 Kts / NNE Z/R= 3
$UMMARY:8-76 BLADES W/ 20 Deg $WEEP ; 60% TAPER & 20 Deg ANHEDRAL TIPS TAIL RO TOR IN PUSHER CONFIGURATION / *** REPEAT OF TIP088 ***

CONFIGURATION FILE : ,DATA7 $76[[[]WEXT/WTail/*INACTIVE*
DATA FILE : TIP089:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 56.04 in. = 4.67 ft.
  CHORD : 3.099996 in. = .258333 ft.
  SOLIDITY : .0704325

TAIL BLADE PROPERTIES :
  RADIUS : 11.499996 in. = .958333 ft.
  CHORD : 2.000004 in. = .166667 ft.
  SOLIDITY : .221433

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000873 +.68915(Ct)^1.5 +266.388(Ct)^3

STANDARD DEVIATION = 3.87469E-15
MEAN ERROR = -8.26087E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-3.96	+1.41	0.00000	0.000000	0.00000
2	0.000	+0.0	+1135.84	+287.14	0.00000	0.000000	0.00000
3	0.000	+0.0	+1.08	+1.23	0.00000	0.000000	0.00000
4	0.000	+0.0	+.70	+.21	0.00000	0.000000	0.00000
5	.551	+.0	+4.19	+25.97	.00095	.001265	.00436
6	.551	+2.0	+47.65	+29.30	.01083	.001426	.14830
7	.551	+2.9	+81.95	+34.44	.01862	.001676	.28461
8	.551	+4.0	+119.62	+42.06	.02722	.002049	.41116
9	.551	+5.0	+157.15	+51.64	.03573	.002514	.50412
10	.552	+6.0	+196.68	+63.23	.04464	.003073	.57596
11	.551	+7.0	+240.52	+76.92	.05461	.003740	.64040
12	.551	+8.0	+284.29	+93.64	.06467	.004561	.67662
13	.551	+9.1	+333.46	+114.57	.07586	.005581	.70252
14	.551	+10.2	+384.87	+140.06	.08753	.006821	.71248
15	.551	+11.1	+426.32	+163.99	.09705	.007993	.70975
16	.551	+12.0	+466.63	+187.16	.10630	.009129	.71236
17	.550	+12.5	+491.76	+204.31	0.00000	0.000000	0.00000
18	.550	+12.0	+477.39	+193.08	.10883	.009426	.71484
19	.551	+11.5	+444.38	+176.57	.10124	.008614	.70180
20	.551	+10.5	+400.39	+150.39	.09106	.007324	.70408
21	.551	+9.5	+348.11	+124.36	.07913	.006053	.69009
22	.552	+8.5	+308.73	+104.30	.07009	.005070	.68676
23	.551	+7.4	+260.79	+86.35	.05929	.004203	.64449
24	.551	+6.4	+223.98	+72.80	.05087	.003503	.61464
25	.552	+5.5	+193.55	+59.48	.04166	.002891	.55204
26	.551	+4.4	+142.23	+49.15	.03232	.002392	.45596
27	.551	+3.5	+105.15	+40.20	.02391	.001957	.35441
28	.552	+.1	+7.43	+26.81	.00169	.001303	.00998
29	0.000	+.1	-.70	+.21	0.00000	0.000000	0.00000
30	0.000	+.1	-3.96	+1.71	0.00000	0.000000	0.00000
31	0.000	+.1	+1133.94	+287.68	0.00000	0.000000	0.00000
32	0.000	+.1	-.83	+.63	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0003543 +1.32420(Ct)^1.5 +91.592(Ct)^3

STANDARD DEVIATION = 6.87386E-15
MEAN ERROR = -1.50000E-19

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-.36	+1.25	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.66	+259.29	0.00000	0.000000	0.00000
3	0.000	+0.0	+.01	+.09	0.00000	0.000000	0.00000
4	0.000	+0.0	-.00	+.06	0.00000	0.000000	0.00000
5	.548	-.2	+4.27	+1.28	.00742	.002332	.09126
6	.550	+1.0	+5.14	+1.08	.00862	.001891	.14079
7	.561	-.8	+6.97	+1.35	.01155	.002336	.17672
8	.552	+1.7	+7.05	+1.29	.01207	.002301	.19182
9	.577	+2.3	+9.42	+1.81	.01475	.002950	.20212
10	.552	+2.6	+11.47	+1.89	.01965	.003381	.27129
11	.564	+3.1	+14.98	+2.21	.02459	.003790	.33852
12	.549	+2.6	+17.00	+2.72	.02939	.004909	.34147
13	.554	+7.1	+19.47	+3.14	.03306	.005571	.35900
14	.556	+6.6	+25.57	+4.51	.04318	.007938	.37500
15	.557	+7.7	+29.56	+5.23	.04975	.009178	.40225
16	.548	+10.7	+33.29	+6.29	0.00000	0.000000	0.00000
17	.549	+12.8	+38.50	+7.52	0.00000	0.000000	0.00000
18	.551	+10.9	+35.75	+6.71	.06149	.012041	.42130
19	.552	+10.5	+32.77	+5.93	.05600	.010581	.41757
20	.552	+2.5	+25.84	+4.47	.04418	.007974	.38751
21	.551	+5.3	+19.95	+2.91	.03429	.005218	.40486
22	.551	+4.1	+17.58	+2.65	.03023	.004759	.36747
23	.554	+4.9	+14.66	+2.47	.02489	.004375	.29855
24	.549	+1.8	+11.76	+1.87	.02032	.003366	.28629
25	.556	+3.8	+10.84	+1.76	.01828	.003104	.26494
26	.556	+1.8	+9.92	+1.67	.01670	.002936	.24464
27	.551	+1.6	+6.89	+1.37	.01184	.002449	.17500
28	.552	-2.8	+4.48	+1.16	.00753	.002079	.10455
29	0.000	-2.0	+.00	+.06	0.00000	0.000000	0.00000
30	0.000	-2.0	-.41	+1.24	0.00000	0.000000	0.00000
31	0.000	-2.0	-564.71	+259.21	0.00000	0.000000	0.00000
32	0.000	-2.0	+.05	+.04	0.00000	0.000000	0.00000

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 90 DATE :18 NOVEMBER 1982 / 14:07 OAT= 51.5 BAROMETER= 30.395 WET BUL
B TEMP= 44 DRY BULB TEMP= 51.5
WIND CONDITIONS :LIGHT 0 to 3 Kts / NNE D/R= 3
SUMMARY:S-76 BLADES W/ 20 Deg SWEEP ; 60% TAPER & 20 Deg ANHEDRAL TIPS / TAIL RO
TOR IN PUSHER CONFIGURATION

CONFIGURATION FILE : DATA7 S76[[[]WENT/wTail/*INACTIVE*
DATA FILE : TIP090:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.099996 in. = .258333 ft.
SOLIDITY : .0784329

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :7 JUNE :983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000889 +.71746(Ct)^1.5 +216.545(Ct)^3

STANDARD DEVIATION = 2.07717E-15
MEAN ERROR = 4.24000E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-3.13	+1.05	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.76	+287.86	0.00000	0.000000	0.00000
3	0.000	+0.0	+.00	+.51	0.00000	0.000000	0.00000
4	0.000	+0.0	+.00	+.15	0.00000	0.000000	0.00000
5	.601	-.2	-3.35	+30.74	-.00064	.001259	-.00242
6	.601	+1.8	+55.72	+34.79	.01066	.001425	.14489
7	.601	+2.9	+93.77	+41.49	.01796	.001701	.26544
8	.600	+3.9	+131.37	+49.89	.02522	.002051	.36645
9	.600	+4.9	+177.95	+61.18	.03412	.002512	.47085
10	.601	+5.9	+230.48	+75.68	.04412	.003102	.56060
11	.600	+7.0	+285.52	+94.26	.05475	.003870	.62112
12	.600	+8.0	+329.52	+112.90	.06322	.004638	.64311
13	.600	+8.0	+336.79	+113.87	.06464	.004679	.65900
14	.600	+8.9	+392.07	+136.50	.07516	.005603	.69011
15	.599	+10.0	+452.98	+165.98	.08713	.006836	.70599
16	.600	+10.9	+503.58	+195.16	.09678	.008031	.70349
17	.600	+11.9	+564.06	+229.35	.10820	.009421	.70895
18	.600	+11.4	+541.87	+214.94	.10394	.008829	.71230
19	.600	+10.4	+480.19	+180.30	.09226	.007418	.70895
20	.601	+9.4	+418.73	+150.40	.08021	.006169	.69103
21	.600	+9.4	+424.48	+151.27	.08133	.006207	.70117
22	.601	+8.4	+369.79	+125.24	.07007	.005137	.67756
23	.601	+7.4	+314.60	+104.80	.06024	.004297	.64570
24	.601	+6.4	+264.06	+87.18	.05058	.003576	.59701
25	.601	+5.4	+218.51	+71.39	.04029	.002926	.51872
26	.601	+4.4	+165.55	+58.57	.03170	.002402	.44103
27	.601	+3.3	+119.87	+47.37	.02293	.001940	.33580
28	.601	+2.3	+84.19	+40.47	.01612	.001659	.23152
29	.601	-.0	+6.86	+31.28	.00131	.001283	.00497
30	0.000	-.0	-.00	+.15	0.00000	0.000000	0.00000
31	0.000	-.0	-3.64	+1.35	0.00000	0.000000	0.00000
32	0.000	-.0	+1134.76	+287.71	0.00000	0.000000	0.00000
33	0.000	-.0	-.64	+.54	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0003760 +1.50812(Ct)^1.5 -68.538(Ct)^3

STANDARD DEVIATION = 2.62985E-14
MEAN ERROR = -5.36000E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-.24	+1.31	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.55	+259.24	0.00000	0.000000	0.00000
3	0.000	+0.0	+.12	+.04	0.00000	0.000000	0.00000
4	0.000	+0.0	+.12	+.04	0.00000	0.000000	0.00000
5	.600	+1.3	+6.73	+1.82	.00975	.002754	.11640
6	.605	+1.3	+7.57	+1.58	.01078	.002342	.15914
7	.600	+1.3	+7.25	+1.79	.01051	.002712	.13218
8	.605	+2.5	+10.81	+1.94	.01428	.002895	.19623
9	.604	+3.1	+10.99	+2.21	.01570	.003298	.19906
10	.600	+3.9	+13.33	+2.41	.01931	.003636	.24559
11	.600	+5.3	+18.55	+3.34	.02687	.005044	.29855
12	.600	+6.5	+24.21	+4.19	.03508	.006337	.34499
13	.600	+6.4	+22.39	+3.67	.03244	.005550	.35035
14	.603	+6.7	+25.41	+4.10	.03651	.006143	.37783
15	.613	+8.5	+30.72	+5.36	.04260	.007750	.37751
16	.604	+9.6	+33.87	+6.18	.04842	.009211	.38489
17	.600	+11.8	+43.87	+7.97	.06357	.012049	.44259
18	.616	+10.8	+40.73	+7.34	.05606	.010637	.41915
19	.615	+8.8	+30.86	+5.64	.04257	.008120	.35996
20	.600	+6.9	+25.31	+4.20	.03667	.006346	.36817
21	.600	+7.8	+28.09	+4.79	.04070	.007244	.37710
22	.605	+5.3	+22.54	+3.59	.03219	.005343	.35964
23	.600	+5.3	+19.50	+3.22	.02826	.004864	.32494
24	.600	+1.9	+14.73	+2.57	.02134	.003881	.26718
25	.600	+.9	+13.34	+2.33	.01932	.003517	.25410
26	.601	-1.0	+11.10	+1.98	.01601	.002866	.23524
27	.600	-1.9	+8.48	+1.58	.01220	.002386	.18988
28	.600	-1.9	+8.61	+1.75	.01248	.002646	.17528
29	.600	-2.8	+5.93	+1.49	.00859	.002250	.11774
30	0.000	-2.8	-.12	+.04	0.00000	0.000000	0.00000
31	0.000	-2.8	-.53	+1.31	0.00000	0.000000	0.00000
32	0.000	-2.8	-564.49	+259.24	0.00000	0.000000	0.00000
33	0.000	-2.8	+.08	+.02	0.00000	0.000000	0.00000

 ORIGINAL PAGE IS OF POOR QUALITY

RUN # : 91 DATE :18 NOVEMBER 1982 / 15:00 — OAT= 51 BAROMETER= 30.394 WET BULB TEMP= 46 DRY BULB TEMP= 51
WIND CONDITIONS :LIGHT 0 to 3 Kts / NNE Z/R= 3
SUMMARY:S-76 BLADES W/ 20 Deg SWEEP : 60% TAPER & 20 Deg ANHEDRAL TIPS / TAIL ROTOR IN PUSHER CONFIGURATION

CONFIGURATION FILE : DATA7 S76[II]wEXT/wTail/*INACTIVE*
DATA FILE : TIP091:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.099996 in. = .258333 ft.
SOLIDITY : .0704325

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

***********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000918 +.88699(Ct)^1.5 +290.052(Ct)^3

STANDARD DEVIATION = 1.07469E-15
MEAN ERROR = -4.09091E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-3.13	+1.32	0.00000	0.000000	0.00000
2	0.000	+0.0	+1135.14	+287.83	0.00000	0.000000	0.00000
3	0.000	+0.0	+.38	+.54	0.00000	0.000000	0.00000
4	0.000	+0.0	+.38	+.12	0.00000	0.000000	0.00000
5	.651	+.0	+3.84	+36.54	00063	.001276	.00230
6	.651	+2.1	+73.35	+43.38	.01196	.001515	.16203
7	.650	+3.1	+121.75	+51.52	.01989	.001802	.29206
8	.650	+4.1	+170.67	+61.40	.02787	.002147	.40669
9	.650	+5.1	+223.98	+75.69	.03659	.002648	.49687
10	.651	+6.0	+284.86	+93.25	.04649	.003259	.57721
11	.650	+7.1	+346.77	+114.60	.05663	.004008	.63108
12	.651	+8.1	+412.48	+139.19	.06733	.004865	.67390
13	.650	+9.1	+476.11	+170.32	.07792	.005969	.68381
14	.650	+10.1	+545.55	+203.41	.08921	.007122	.70203
15	.650	+10.6	+577.41	+224.12	.09445	.007850	.69388
16	.650	+9.6	+512.13	+186.14	.08371	.006515	.69763
17	.650	+8.6	+443.69	+154.80	.07255	.005420	.67659
18	.651	+7.6	+387.68	+130.99	.06325	.004576	.65228
19	.651	+6.6	+322.26	+106.04	.05257	.003704	.61067
20	.650	5.6	+259.58	+86.56	.04240	.003028	.54119
21	.650	+4.6	+199.14	+70.34	.03254	.002462	.44755
22	.651	+3.5	+146.08	+56.26	.02383	.001966	.35129
23	.650	+2.5	+99.90	+47.65	.01633	.001668	.23483
24	.651	+1.5	+63.71	+42.57	.01039	.001487	.13371
25	.650	+.0	+9.02	+37.53	.00147	.001314	.00809
26	.650	+.0	+5.38	+37.86	.00088	.001326	.00370
27	0.000	+.0	-.38	+.12	0.00000	0.000000	0.00000
28	0.000	+.0	-3.38	+1.47	0.00000	0.000000	0.00000
29	0.000	+.0	+1134.13	+287.83	0.00000	0.000000	0.00000
30	0.000	+.0	-.76	+.51	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0003770 +1.39789(Ct)^1.5 +96.167(Ct)^3

STANDARD DEVIATION = 2.787896-15
MEAN ERROR = -5.90909E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-.52	+1.34	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.61	+259.28	0.00000	0.000000	0.00000
3	0.000	+0.0	+.05	+.01	0.00000	0.000000	0.00000
4	0.000	+0.0	+.05	+.01	0.00000	0.000000	0.00000
5	.650	+6.4	+7.14	+1.77	.00882	.002281	.12087
6	.648	+7.0	+7.59	+1.92	.00944	.002491	.12246
7	.647	+6.4	+9.69	+2.07	.01207	.002692	.16392
8	.651	+8.5	+13.84	+2.48	.01684	.003076	.21979
9	.650	+10.1	+15.68	+2.98	.01935	.003834	.23358
10	.650	+9.8	+15.32	+2.88	.01892	.003615	.23964
11	.650	+12.1	+22.97	+3.91	.02837	.004940	.31513
12	.650	+13.1	+27.63	+4.49	.03413	.005783	.36281
13	.648	+14.5	+32.55	+5.81	.04058	.007545	.35937
14	.650	+15.6	+38.31	+6.96	.04733	.008975	.38174
15	.649	+16.2	+41.99	+7.89	.05210	.010210	.38753
16	.650	+9.7	+32.48	+5.61	.04002	.007232	.36838
17	.650	+12.7	+27.30	+4.43	.03373	.005714	.36871
18	.649	+6.8	+22.80	+3.97	.02829	.005143	.30787
19	.650	+7.5	+18.74	+3.12	.02315	.004022	.29145
20	.650	+6.2	+15.43	+2.61	.01906	.003365	.26822
21	.649	+5.2	+12.68	+2.36	.01568	.003051	.21415
22	.650	+4.4	+9.92	+1.77	.01225	.002277	.19525
23	.650	+4.4	+9.46	+1.75	.01168	.002252	.18658
24	.650	+5.4	+7.63	+1.69	.00942	.002182	.13956
25	.650	+6.3	+7.23	+1.71	.00894	.002199	.12785
26	.650	-.7	+7.03	+1.85	.00869	.002388	.11288
27	0.000	-.7	-.05	+.01	0.00000	0.000000	0.00000
28	0.000	-.7	-.62	+1.38	0.00000	0.000000	0.00000
29	0.000	-.7	-564.75	+259.51	0.00000	0.000000	0.00000
30	0.000	-.7	-.15	+.01	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 92 DATE :10 NOVEMBER 1982 : 16:15 OAT= 49.5 BAROMETER= 30.405 WET BUL
B TEMP= 44 DRY BULB TEMP= 49.5
WIND CONDITIONS :LIGHT 0 to 2 Kts / NORTH R/R= 1.2
SUMMARY:9-76 BLADES W/ 20 Deg SWEEP ; 60% TAPER & 20 Deg ANHEDRAL TIPS - TAIL RO
TOR IN PUSHER CONFIGURATION / IGE

CONFIGURATION FILE : DATA7 $76:::::WEXT/WTail/*INACTIVE*
DATA FILE : TIP092:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.099996 in. = .258333 ft.
SOLIDITY : .0784329

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000900+.6935*(Ct)^1.5 +221.790*(Ct)^3

STANDARD DEVIATION = 2.351516-16
MEAN ERROR = 4.80000E-17

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-3.73	+1.07	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.81	+287.25	0.00000	0.000000	0.00000
3	0.000	+0.0	-.75	+1.13	0.00000	0.000000	0.00000
4	0.000	+0.0	-.00	+.14	0.00000	0.000000	0.00000
5	.601	-.0	-6.35	+31.67	-.00121	.001296	.00612
6	.601	-.0	-3.11	+31.79	-.00060	.001302	.00209
7	.600	+2.1	+56.04	+35.81	.01074	.001469	.14207
8	.601	+3.6	+113.48	+[illegible]33	.02173	.001859	.32336
9	.600	+4.6	+158.79	+55.06	.03043	.002259	.44083
10	.601	+5.6	+208.47	+68.43	.03991	.002805	.53339
11	.600	+6.1	+233.96	+75.70	.04482	.003105	.57343
12	.600	+7.2	+294.84	+94.81	.05632	.003889	.64489
13	.600	+8.2	+347.39	+116.06	.06664	.004768	.67716
14	.600	+9.1	+395.33	+136.18	.07579	.005591	.70039
15	.600	+10.1	+456.48	+164.85	.08748	.006732	.72125
16	.600	+11.1	+518.60	+198.38	.09951	.008151	.72269
17	.599	+11.1	+518.22	+198.88	.09965	.008156	.72378
18	.599	+10.5	+485.64	+180.54	.09331	.007428	.72011
19	.600	+10.1	+465.71	+170.39	.08928	.006995	.71573
20	.600	+9.6	+433.88	+153.51	.08318	.006296	.71462
21	.601	+9.1	+405.96	+140.63	.07772	.005765	.70531
22	.601	+8.5	+377.41	+128.79	.07216	.005273	.68985
23	.601	+8.5	+377.02	+128.78	.07210	.005270	.68935
24	.601	+8.0	+347.46	+116.48	.06642	.004768	.67372
25	.601	+7.5	+324.94	+107.50	.06217	.004404	.66051
26	.601	+7.0	+296.87	+98.04	.05684	.004019	.63264
27	.601	+6.5	+266.36	+87.08	.05100	.003570	.60541
28	.601	+5.1	+197.53	+66.36	.03778	.002717	.58703
29	.599	+1.1	+32.77	+33.29	.00630	.001370	.06846
30	0.000	+1.1	+.00	+.14	0.00000	0.000000	0.00000
31	0.000	+1.1	-3.11	+1.37	0.00000	0.000000	0.00000
32	0.000	+1.1	+1135.14	+288.12	0.00000	0.000000	0.00000
33	0.000	+1.1	+.00	+.38	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0004024 +1.14117(Ct)^1.5 +192.180(Ct)^3

STANDARD DEVIATION = 7.838378-16
MEAN ERROR = -1.60000E-16

Pt.	Tip Mθ	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-.47	+1.28	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.73	+299.23	0.00000	0.000000	0.00000
3	0.000	+0.0	-.06	+.03	0.00000	0.000000	0.00000
4	0.000	+0.0	+.05	+.01	0.00000	0.000000	0.00000
5	.601	-.0	-.55	+1.15	-.00079	.001736	.00424
6	.600	+0.4	+5.90	+1.65	.00796	.002488	.09491
7	.600	+5.1	+6.72	+1.56	.00973	.002361	.13521
8	.600	+0.6	+7.62	+1.73	.01102	.002609	.14796
9	.600	+9.3	+9.65	+1.98	.01398	.002868	.19182
10	.600	+9.8	+13.50	+2.21	.01954	.003334	.27263
11	.600	+9.0	+13.41	+2.21	.01943	.003348	.26926
12	.599	+10.4	+17.33	+2.73	.02516	.004144	.32043
13	.601	+11.9	+20.16	+3.33	.02910	.005017	.32919
14	.599	+14.0	+25.32	+4.00	.03677	.006062	.38700
15	.599	+15.3	+29.73	+5.07	.04318	.007681	.38866
16	.599	+14.8	+36.98	+6.66	.05378	.010108	.41057
17	.598	+16.4	+37.15	+6.66	.05410	.010115	.41391
18	.600	+16.5	+34.49	+5.84	.04993	.008816	.42112
19	.602	+14.9	+31.74	+5.25	.04571	.007892	.41201
20	.602	+14.9	+30.45	+4.83	.04388	.007253	.42050
21	.603	+13.0	+25.40	+3.92	.03649	.005869	.39523
22	.598	+12.9	+24.85	+4.01	.03624	.006101	.37620
23	.598	+13.0	+24.29	+3.81	.03539	.005786	.38288
24	.600	+12.5	+21.94	+3.36	.03178	.005078	.37126
25	.599	+11.7	+20.92	+3.22	.03041	.004879	.36167
26	.600	+9.1	+18.07	+2.81	.02616	.004248	.33137
27	.600	+11.6	+16.54	+2.58	.02396	.003908	.31575
28	.602	+6.6	+11.	+1.94	.01722	.002917	.25782
29	.599	+4.2	+5	+1.18	.00758	.001792	.12252
30	0.000	+4.2	-.05	+.01	0.00000	0.000000	0.00000
31	0.000	+4.2	-.37	+1.27	0.00000	0.000000	0.00000
32	0.000	+4.2	-564.67	+299.05	0.00000	0.000000	0.00000
33	0.000	+4.2	+.00	+.11	0.00000	0.000000	0.00000

ORIGINAL PAGE IS
OF POOR QUALITY

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 93   DATE :18 NOVEMBER 1982 / 17:30 OAT= 49.5 BAROMETER= 30.415 WET BUL
B TEMP= 44 DRY BULB TEMP= 49.5
WIND CONDITIONS :LIGHT 0 to 3 kts /NORTHZ/R= .75
SUMMARY:S-76 BLADES W/ 20 Deg SWEEP: 40% TAPER & 20 Deg ANHEDRAL TIPS/ TAIL ROTO
R IN PUSHER CONFIGURATION / IGE

CONFIGURATION FILE : DATA7   S76[II]WEXT/wTail/*INACTIVE*
DATA FILE : TIP093:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.099996 in. = .258333 ft.
SOLIDITY : .0704325

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

***********MAIN-ROTOR PERFORMANCE***********

BEST CURVE FIT EQUATION: Cq= +.0000909 +.62327(Ct)^1.5 +236.586(Ct)^3

STANDARD DEVIATION = 3.84615E-16
MEAN ERROR = -7.69231E-17

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-3.67	+.45	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.33	+287.92	0.00000	0.000000	0.00000
3	0.000	+0.0	-.43	+.45	0.00000	0.000000	0.00000
4	0.000	+0.0	+.05	+.15	0.00000	0.000000	0.00000
5	.601	+.4	+1.83	+31.47	.00035	.001288	.00095
6	.601	+1.5	+38.99	+33.66	.00746	.001379	.08768
7	.601	+2.5	+72.97	+36.16	.01395	.001562	.19789
8	.600	+3.6	+117.83	+45.49	.02253	.001866	.34011
9	.600	+5.3	+207.82	+65.25	.03986	.002679	.55727
10	.601	+6.1	+250.13	+76.57	.04784	.003136	.62623
11	.601	+7.0	+305.07	+93.56	.05840	.003835	.69052
12	.601	+8.1	+365.02	+115.84	.06984	.004746	.72977
13	.601	+9.2	+426.25	+141.39	.08156	.005793	.75451
14	.600	+10.1	+480.01	+166.23	.09210	.006830	.76802
15	.600	+11.1	+539.58	+197.96	.10339	.008122	.76806
16	.600	+11.1	+540.18	+197.33	.10375	.008116	.77271
17	.601	+10.6	+515.11	+183.85	.09862	.007537	.77108
18	.600	+10.0	+485.05	+168.36	.09316	.006924	.77064
19	.599	+10.0	+482.34	+167.19	.09277	.006885	.77009
20	.600	+9.6	+461.76	+157.22	.08860	.006459	.76615
21	.601	+8.6	+407.72	+132.84	.07797	.005439	.75109
22	.600	+8.0	+374.54	+119.93	.07184	.004925	.73357
23	.601	+7.6	+348.13	+109.90	.06654	.004498	.71614
24	.601	+7.0	+319.73	+99.60	.06107	.004073	.69522
25	.601	+6.6	+296.96	+91.16	.05682	.003735	.68049
26	.601	+6.0	+265.15	+81.64	.05074	.003346	.64114
27	.601	+5.0	+209.87	+65.97	.04007	.002697	.55813
28	.600	+4.1	+156.45	+53.21	.02998	.002183	.44615
29	.601	+1.8	+56.48	+36.00	.01081	.001475	.14294
30	.600	+.0	-.08	+32.04	-.00002	.001316	.00001
31	0.000	+.0	-.05	+.15	0.00000	0.000000	0.00000
32	0.000	+.0	-3.67	+.60	0.00000	0.000000	0.00000
33	0.000	+.0	+1134.83	+288.07	0.00000	0.000000	0.00000
34	0.000	+.0	-.56	+.24	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0003767 +1.36173(Ct)^1.5 +85.229(Ct)^3

STANDARD DEVIATION = 8.61538E-14
MEAN ERROR = -1.72308E-14

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-.27	+1.38	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.61	+259.24	0.00000	0.000000	0.00000
3	0.000	+0.0	+.05	+.04	0.00000	0.000000	0.00000
4	0.000	+0.0	-.05	+.64	0.00000	0.000000	0.00000
5	.600	-.0	+.54	+1.16	.00078	.001755	.00414
6	.599	+2.3	+6.85	+1.51	.00996	.002282	.14489
7	.599	+3.9	+6.79	+1.55	.00986	.002350	.13872
8	.598	+6.2	+8.90	+1.89	.01296	.002866	.17135
9	.599	+6.5	+12.28	+2.14	.01786	.003253	.24407
10	.600	+8.1	+14.49	+2.62	.02098	.003952	.25576
11	.601	+8.9	+17.87	+3.03	.02583	.004565	.30261
12	.600	+9.7	+20.57	+3.48	.02978	.005256	.32564
13	.601	+10.7	+25.84	+4.42	.03734	.006661	.36052
14	.598	+12.1	+29.88	+5.26	.04353	.008001	.37774
15	.600	+14.0	+36.18	+6.67	.05238	.010074	.39598
16	.600	+14.0	+37.25	+6.79	.05401	.010268	.40672
17	.602	+13.0	+32.99	+5.87	.04745	.008807	.39055
18	.602	+11.9	+29.69	+5.16	.04277	.007754	.37954
19	.601	+9.4	+31.87	+5.47	.04606	.008253	.39851
20	.603	+10.5	+27.57	+4.78	.03955	.007148	.36620
21	.600	+8.9	+23.38	+3.90	.03383	.005884	.35187
22	.602	+7.9	+20.55	+3.34	.02961	.005015	.33803
23	.602	+7.1	+20.16	+3.15	.02898	.004718	.34790
24	.603	+5.8	+19.23	+2.92	.02768	.004371	.34908
25	.599	+6.0	+15.24	+2.43	.02215	.003691	.29718
26	.599	+4.9	+14.99	+2.41	.02177	.003657	.29220
27	.600	+3.5	+11.55	+2.08	.01671	.003141	.22876
28	.601	+3.6	+8.37	+1.63	.01207	.002452	.17982
29	.602	+.9	+5.46	+1.29	.00786	.001941	.11957
30	.602	+2.9	+5.68	+1.59	.00818	.002387	.10317
31	0.000	+2.9	+.05	+.04	0.00000	0.000000	0.00000
32	0.000	+2.9	-.42	+1.39	0.00000	0.000000	0.00000
33	0.000	+2.9	-564.60	+259.02	0.00000	0.000000	0.00000
34	0.000	+2.9	+.00	+.04	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 94 DATE :19 NOVEMBER 1982 / 09125 OAT= 51 BAROMETER= 30.56 WET BULB T
EMP= 46 DRY BULB TEMP= 51
WIND CONDITIONS :GUSTY 0 to 4 Kts / NORTH Z R= 3
SUMMARY:H-34 CALIBRATION RUN: ISOLATED MAIN ROTOR

CONFIGURATION FILE : DATA8 H34[[[]/wTail/*INACTIVE*
DATA FILE : TIP094:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 54.24996 in. = 4.52083 ft.
  CHORD : 4.250004 in. = .354167 ft.
  SOLIDITY : .099747

TAIL BLADE PROPERTIES :
  RADIUS : 11.499996 in. = .958333 ft.
  CHORD : 2.000004 in. = .166667 ft.
  SOLIDITY : .221433

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001090 +.89475(Ct)^1.5 +31.604(Ct)^3

STANDARD DEVIATION = 5.44862E-15
MEAN ERROR = 1.25000E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-3.75	+.60	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.73	+287.20	0.00000	0.000000	0.00000
3	0.000	+0.0	-.03	+1.17	0.00000	0.000000	0.00000
4	0.000	+0.0	+.25	+.60	0.00000	0.000000	0.00000
5	.601	+0.0	+1.17	+34.01	.00017	.001079	.00045
6	.601	+2.5	+54.95	+39.86	.00788	.001265	.12359
7	.601	+3.5	+105.38	+50.72	.01511	.001610	.25768
8	.600	+4.5	+155.12	+64.32	.02228	.002044	.36346
9	.600	+5.5	+214.33	+83.44	.03078	.002651	.45503
10	.600	+6.5	+287.93	+107.09	.04142	.003407	.55245
11	.600	+7.5	+347.81	+134.61	.04989	.004281	.58130
12	.600	+8.6	+418.01	+169 67	.05020	.005404	.61027
13	.600	+9.6	+495.82	+204.39	.07136	.006507	.65423
14	.600	+10.1	+514.94	+220.99	.07413	.007037	.64050
15	.601	+9.0	+456.06	+183.98	.06544	.005848	.64022
16	.601	+8.0	+390.53	+151.66	.05595	.004807	.61498
17	.600	+7.0	+310.24	+122.34	.04455	.003886	.54042
18	.601	+6.0	+244.41	+96.19	.03506	.003053	.48035
19	.601	+6.0	+255.52	+95.74	.03660	.003033	.51544
20	.600	+5.0	+187.95	+75.30	.02693	.002392	.41260
21	.601	+4.0	+140.45	+58.71	.02015	.001863	.34287
22	.600	+3.0	+83.84	+46.79	.01204	.001486	.19847
23	.600	+2.0	+46.48	+39.32	.00668	.001249	.09753
24	.600	+.2	+4.63	+34.78	.00066	.001102	.00347
25	0.000	+.2	-.25	+.60	0.00000	0.000000	0.00000
26	0.000	+.2	-3.76	+1.28	0.00000	0.000000	0.00000
27	0.000	+.2	+1135.02	+287.53	0.00000	0.000000	0.00000
28	0.000	+.2	-.13	+.96	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0004586 +1.48148(Ct)^1.5 -50.212(Ct)^3

STANDARD DEVIATION = 1.56920E-14
MEAN ERROR = -3.60000E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-.96	+1.96	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.43	+259.35	0.00000	0.000000	0.00000
3	0.000	+0.0	+.24	+.16	0.00000	0.000000	0.00000
4	0.000	+0.0	+.02	+.04	0.00000	0.000000	0.00000
5	.601	+.7	+5.74	+1.42	.00825	.002127	.11738
6	.601	+2.7	+8.02	+1.74	.01151	.002603	.15781
7	.601	+3.3	+9.83	+2.50	.01413	.003750	.14983
8	.600	+4.2	+12.02	+2.73	.01735	.004109	.18503
9	.601	+3.7	+15.01	+2.74	.02153	.004106	.25599
10	.598	+6.4	+19.53	+3.40	.02833	.005151	.30797
11	.601	+7.5	+24.86	+4.54	.03577	.006822	.32995
12	.601	+9.5	+30.12	+5.61	.04334	.008422	.35645
13	.600	+11.1	+35.80	+6.47	.05156	.009723	.40068
14	.601	+12.5	+40.90	+7.88	.05884	.011825	.40162
15	.604	+10.4	+34.51	+5.84	.04919	.008681	.41767
16	.601	+8.9	+28.09	+5.24	.04033	.007856	.34301
17	.600	+7.7	+23.87	+4.33	.03444	.006514	.32651
18	.600	+5.0	+15.77	+2.78	.02272	.004181	.27252
19	.600	+5.7	+17.75	+3.16	.02560	.004753	.28677
20	.602	+1.2	+12.86	+2.43	.01841	.003628	.22902
21	.601	+.0	+11.25	+2.48	.01619	.003688	.18999
22	.601	-1.1	+8.34	+2.32	.01198	.003462	.12533
23	.601	-1.5	+7.92	+2.16	.01139	.003243	.12481
24	.602	-2.3	+6.17	+1.45	.00885	.002174	.12733
25	0.000	-2.3	-.02	+.04	0.00000	0.000000	0.00000
26	0.000	-2.3	-1.17	+1.71	0.00000	0.000000	0.00000
27	0.000	-2.3	-564.54	+259.29	0.00000	0.000000	0.00000
28	0.000	-2.3	+.06	+.01	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 95 DATE :19 NOVEMBER 1982 / 10:45 OAT= 49 BAROMETER= 30.57 WET BULB TEMP= 43 DRY BULB TEMP= 49
WIND CONDITIONS :GUSTY 0 to 4 Kts / NORTH Z/R= 3
SUMMARY:H-34 CALIBRATION RUN, ISOLATED MAIN ROTOR

CONFIGURATION FILE : DATA5 H34CIII/NoTail/**INACTIVE**
DATA FILE : TIP095:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 54.24996 in. = 4.52083 ft.
  CHORD : 4.250004 in. = .354167 ft.
  SOLIDITY : .099747

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001065 +.82932(Ct)^1.9 +113.619(Ct)^3

STANDARD DEVIATION = 3.59687E-15
MEAN ERROR =- 7.90000E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-3.75	+.48	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.77	+287.80	0.00000	0.000000	0.00000
3	0.000	+0.0	+.01	+.57	0.00000	0.000000	0.00000
4	0.000	+0.0	-.12	+.83	0.00000	0.000000	0.00000
5	.601	-.0	+4.76	+32.63	.00058	.001036	.00385
6	.600	+2.3	+54.89	+38.84	.00789	.001234	.12669
7	.601	+4.3	+165.04	+63.55	.02368	.002017	.40348
8	.601	+6.3	+291.97	+107.28	.04190	.003405	.56244
9	.600	+7.3	+355.77	+133.85	.05118	.004253	.60666
10	.600	+8.3	+416.20	+163.86	.05991	.005217	.62764
11	.600	+9.3	+486.13	+199.31	.06993	.006342	.65120
12	.600	+9.8	+515.74	+215.34	.07427	.006860	.65897
13	.600	+9.6	+503.62	+207.54	.07237	.006597	.65908
14	.601	+9.1	+475.78	+190.82	.06824	.006053	.65759
15	.600	+8.8	+462.31	+184.00	.06640	.005846	.65365
16	.600	+8.6	+434.93	+171.85	.06244	.005457	.63848
17	.601	+8.6	+443.66	+173.05	.06356	.005484	.65258
18	.600	+8.1	+410.48	+157.68	.05893	.005007	.63803
19	.601	+7.8	+388.71	+148.01	.05571	.004693	.62563
20	.601	+7.3	+354.78	+134.18	.05091	.004260	.60222
21	.601	+6.8	+319.54	+117.79	.04586	.003739	.58653
22	.600	+6.4	+297.87	+109.58	.04280	.003481	.56820
23	.601	+6.1	+280.79	+101.25	.04029	.003214	.56201
24	.601	+5.3	+225.91	+84.77	.03243	.002691	.48452
25	.601	+4.8	+198.00	+74.08	.02838	.002349	.45461
26	.601	+3.3	+113.54	+51.39	.01630	.001631	.28475
27	.601	+2.0	+54.56	+39.86	.00783	.001266	.12227
28	.601	-.0	+1.56	+34.28	.00022	.001088	.00068
29	0.000	-.0	+.12	+.03	0.00000	0.000000	0.00000
30	0.000	-.0	-3.74	+.66	0.00000	0.000000	0.00000
31	0.000	-.0	+1133.88	+288.13	0.00000	0.000000	0.00000
32	0.000	-.0	-.38	+.83	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 96 DATE :19 NOVEMBER 1982 OAT= 52 BAROMETER= 30.53 WET BULB TEMP= 45
DRY BULB TEMP= 52
WIND CONDITIONS :GUSTY 0 to 3 kts/ NORTHZ/R= 3
SUMMARY:H-34 CALIBRATION RUN - ISOLATED MAIN ROTOR/ REPEAT OF TIP095

CONFIGURATION FILE : DATA5 H34CIII/NoT&II/**INACTIVE**
DATA FILE : TIP096:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 54.24996 in. = 4.52083 ft.
CHORD : 4.250004 in. = .354167 ft.
SOLIDITY : .099747

TAIL ROTOR NOT PRESENT

PROCESSING DATE :7 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001075 +.83433(Ct)^1.5 +114.391(Ct)^3

STANDARD DEVIATION = 5.66657E-15
MEAN ERROR = 1.30000E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-3.71	+.68	0.00000	0.000000	0.00000
2	0.000	+0.0	+1134.75	+287.92	0.00000	0.000000	0.00000
3	0.000	+0.0	-.01	+.86	0.00000	0.000000	0.00000
4	0.000	+0.0	+.01	+.00	0.00000	0.000000	0.00000
5	.600	+0.0	+4.26	+33.29	.00061	.001058	.00320
6	.600	+2.1	+59.99	+39.68	.00862	.001262	.14174
7	.601	+3.5	+133.43	+56.32	.01915	.001788	.33104
8	.600	+4.5	+187.61	+71.60	.02695	.002275	.43429
9	.601	+5.0	+224.49	+83.02	.03222	.002635	.49002
10	.601	+6.1	+287.14	+103.96	.04125	.003365	.55609
11	.600	+7.0	+350.38	+130.85	.05038	.004165	.60625
12	.600	+8.1	+421.81	+164.73	0.00000	0.000000	0.00000
13	.600	+8.1	+423.31	+166.68	.06083	.005298	.63239
14	.600	+9.1	+491.64	+201.72	.07061	.006409	.65387
15	.600	+9.1	+488.10	+200.76	.07030	.006396	.65082
16	.601	+8.7	+463.46	+186.08	0.00000	0.000000	0.00000
17	.600	+8.7	+462.23	+186.74	.06644	.005938	.64418
18	.600	+8.4	+447.41	+177.22	0.00000	0.000000	0.00000
19	.600	+8.4	+445.33	+177.19	.06413	.005644	.64259
20	.600	+8.0	+416.86	+163.98	.05993	.005214	.62832
21	.601	+8.6	+468.79	+183.34	0.00000	0.000000	0.00000
22	.601	+7.6	+396.34	+153.40	.05690	.004872	.62223
23	.601	+7.9	+412.39	+159.56	.05909	.005057	.63429
24	.601	+5.8	+229.38	+84.73	.03292	.002698	.49594
25	.601	+6.3	+312.92	+115.87	.04482	.003671	.57723
26	.601	+1.5	+49.31	+39.68	.00707	.001259	.10548
27	.601	+6.7	+328.13	+123.74	.04702	.003922	.58053
28	.601	-.0	+5.41	+34.78	.00078	.001101	.00439
29	0.000	-.0	-.01	+.00	0.00000	0.000000	0.00000
30	0.000	-.0	-2.23	+1.28	0.00000	0.000000	0.00000
31	0.000	-.0	+1135.11	+287.94	0.00000	0.000000	0.00000
32	0.000	-.0	-.01	+.00	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 97 DATE :3 MARCH 1983 17:26 OAT= 52 BAROMETER= 29.029 WET BULB TEMP= 40 DRY BULB TEMP= 51.5
WIND CONDITIONS :GUSTY FROM NNW Z/R= 3
SUMMARY:**CALIBRATION RUN**/TENT LOCATED AT LIGHTING POLE

CONFIGURATION FILE : DATA11 H34[1]/WT&11/***INACTIVE***
DATA FILE : TIR097:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 54.24996 in. = 4.52083 ft.
CHORD : 4.250004 in. = .354167 ft.
SOLIDITY : .099747

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :2 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001134 +.86432(Ct)^1.5 +209.979(Ct)^3

STANDARD DEVIATION = 1.45809E-15
MEAN ERROR = -3.18182E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-1.84	+147.84	0.00000	0.000000	0.00000
2	0.000	+0.0	+1182.35	+91.19	0.00000	0.000000	0.00000
3	0.000	+0.0	-5.88	+1.47	0.00000	0.000000	0.00000
4	0.000	+0.0	+1.28	+.15	0.00000	0.000000	0.00000
5	.602	-1.3	-1.37	+36.20	-.00020	.001170	.00054
6	.603	+.8	+20.27	+36.20	.00295	.001166	.03071
7	.603	+1.6	+44.04	+39.26	.00642	.001266	.09073
8	.603	+2.5	+83.14	+46.72	.01210	.001504	.19759
9	.603	+3.5	+136.08	+59.71	.01984	.001926	.32408
10	.603	+4.5	+188.44	+75.09	.02742	.002416	.41951
11	.604	+4.5	+195.35	+76.10	.02838	.002445	.43656
12	.601	+5.6	+254.72	+99.31	.03737	.003222	.50060
13	.601	+6.6	+312.84	+124.09	.04586	.004024	.54508
14	.601	+7.6	+372.63	+152.88	.05455	.004950	.57473
15	.602	+8.5	+428.06	+183.31	.06259	.005928	.58982
16	.601	+9.6	+496.54	+226.00	.07264	.007333	.59868
17	.601	+9.8	+464.46	+203.68	.06801	.006595	.60065
18	.601	+8.8	+398.94	+167.02	.05842	.005410	.58285
19	.602	+7.8	+339.17	+136.86	.04958	.004425	.55710
20	.602	+6.8	+283.36	+111.38	.04138	.003598	.52251
21	.602	+5.8	+223.86	+87.35	.03270	.002823	.46790
22	.601	+4.8	+167.99	+68.53	.02463	.002223	.38841
23	.602	+3.8	+114.88	+53.97	.01677	.001743	.27810
24	.601	+2.8	+67.95	+43.71	.00995	.001415	.15654
25	.601	+1.8	+31.11	+37.66	.00456	.001220	.05629
26	.602	-.8	+5.88	+35.23	.00086	.001140	.00494
27	0.000	-.8	-1.28	+.15	0.00000	0.000000	0.00000
28	0.000	-.8	-1.86	+148.25	0.00000	0.000000	0.00000
29	0.000	-.8	+1185.37	+92.88	0.00000	0.000000	0.00000
30	0.000	-.8	-1.28	+.25	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 98 DATE :9 MARCH 1983 OAT= 46 BAROMETER= 29.741 WET BULB TEMP= 43 DRY BULB TEMP= 46
WIND CONDITIONS :GUSTY NW Z/R= 3
SUMMARY:H-34 CAL RUN (TENT IN CORNER)

CONFIGURATION FILE : DATA11 H34[11]/wTa11/***INACTIVE***
DATA FILE : TIP898:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 54.24996 in. = 4.52083 ft.
CHORD : 4.250004 in. = .354167 ft.
SOLIDITY : .099747

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :2 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001128 +.88152(Ct)^1.5 +70.192(Ct)^3

STANDARD DEVIATION = 1.45237E-15
MEAN ERROR = 3.75000E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-.56	+145.21	0.00000	0.000000	0.00000
2	0.000	+0.0	+1183.14	+93.24	0.00000	0.000000	0.00000
3	0.000	+0.0	-5.09	+.58	0.00000	0.000000	0.00000
4	0.000	+0.0	-.66	+.36	0.00000	0.000000	0.00000
5	.601	-.0	-7.58	+36.06	-.00112	.001176	.00709
6	.601	+2.0	+9.69	+35.16	.00143	.001145	.01051
7	.601	+2.0	+11.16	+35.06	.00164	.001142	.01303
8	.601	+5.0	+122.46	+54.98	.01804	.001792	.30198
9	.601	+5.0	+126.65	+55.82	.01866	.001819	.31287
10	.601	+8.0	+300.33	+115.01	.04426	.003750	.55468
11	.600	+8.0	+302.29	+116.40	.04452	.003801	.55387
12	.602	+10.1	+431.87	+178.64	.06341	.005801	.61459
13	.601	+10.1	+432.74	+178.15	.06366	.005797	.61879
14	.599	+11.2	+501.72	+215.84	.07432	.007046	.64219
15	.601	+11.2	+507.82	+219.52	.07485	.007157	.63900
16	.601	+11.6	+538.44	+234.86	.07945	.007665	.65239
17	.599	+11.6	+533.77	+234.13	.07914	.007678	.64752
18	.601	+9.5	+389.31	+156.93	.05738	.005110	.59955
19	.601	+6.0	+178.11	+78.68	.02626	.002305	.41229
20	.601	+1.5	+3.96	+35.98	.00058	.001169	.00269
21	0.000	+1.5	+.66	+.36	0.00000	0.000000	0.00000
22	0.000	+1.5	+4.65	+145.66	0.00000	0.000000	0.00000
23	0.000	+1.5	+1191.01	+92.42	0.00000	0.000000	0.00000
24	0.000	+1.5	+.02	+.05	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 99 DATE :11 MARCH 1983 8:32 OAT= 40 BAROMETER= 29.849 WET BULB TEMP= 37.5 DRY BULB TEMP= 40
WIND CONDITIONS :GUSTY 0 to 5 NORTH Z/R= .75
SUMMARY:H-34 SYSTEM CHECK/ RPT OF TIP067

CONFIGURATION FILE : DATA11 H34CIII/WTail/***INACTIVE***
DATA FILE : TIP099:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 54.24996 in. = 4.52083 ft.
CHORD : 4.250004 in. = .354167 ft.
SOLIDITY : .099747

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :2 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001154 +.69486(Ct)^1.5 +161.295(Ct)^3

STANDARD DEVIATION = 4.58123E-16
MEAN ERROR = -1.11111E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+1.17	+146.11	0.00000	0.000000	0.00000
2	0.000	+0.0	+1186.99	+92.09	0.00000	0.000000	0.00000
3	0.000	+0.0	-1.64	+.57	0.00000	0.000000	0.00000
4	0.000	+0.0	-1.24	+.20	0.00000	0.000000	0.00000
5	.601	+.0	-9.01	+36.28	-.00133	.001186	.00915
6	.601	+1.0	-1.91	+35.15	-.00028	.001149	.00892
7	.601	+2.0	+9.25	+35.85	.00137	.001172	.00963
8	.601	+3.0	+47.52	+38.92	.00703	.001274	.10333
9	.601	+4.0	+91.81	+45.97	.01398	.001504	.23495
10	.601	+5.0	+150.52	+58.26	.02226	.001906	.38915
11	.601	+6.0	+215.15	+75.06	.03181	.002455	.51610
12	.600	+7.0	+281.07	+95.51	.04167	.003132	.60648
13	.601	+8.0	+342.89	+118.97	.05053	.003887	.65259
14	.600	+9.1	+415.78	+149.69	.06157	.004903	.69582
15	.599	+10.0	+481.07	+180.10	.07154	.005924	.72134
16	.601	+10.0	+480.47	+180.53	.07092	.005894	.71562
17	.600	+9.5	+449.60	+164.38	.06663	.005389	.71279
18	.600	+8.5	+382.81	+134.45	.05676	.004409	.69481
19	.600	+7.5	+315.38	+107.68	.04673	.003529	.63924
20	.601	+6.5	+249.72	+85.20	.03694	.002788	.56870
21	.601	+5.5	+186.22	+66.77	.02751	.002182	.46704
22	.601	-.0	-4.70	+35.73	-.00070	.001169	.00350
23	0.000	-.0	+1.24	+.20	0.00000	0.000000	0.00000
24	0.000	-.0	+3.15	+146.48	0.00000	0.000000	0.00000
25	0.000	-.0	+1187.52	+92.39	0.00000	0.000000	0.00000
26	0.000	-.0	+1.24	+.20	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 100 DATE :11 MARCH 1983 9:12 OAT= 39.5 BAROMETER= 29.445 WET BULB TE
MP= 37 DRY BULB TEMP= 39.5
WIND CONDITIONS :GUSTY 0 to 5 NORTH Z/R= 3
SUMMARY:H-34 CAL RUN

CONFIGURATION FILE : DATA11 H34CIII/wTail/***INACTIVE***
DATA FILE : TIP100:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 54.24996 in. = 4.52083 ft.
CHORD : 4.250004 in. = .354167 ft.
SOLIDITY : .099747

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :2 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001167 +.83283(Ct)^1.5 +159.086(Ct)^3

STANDARD DEVIATION = 2.12959E-15
MEAN ERROR = 4.76190E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+1.94	+146.22	0.00000	0.000000	0.00000
2	0.000	+0.0	+1188.25	+92.41	0.00000	0.000000	0.00000
3	0.000	+0.0	+.02	+.25	0.00000	0.000000	0.00000
4	0.000	+0.0	-.00	+.20	0.00000	0.000000	0.00000
5	.601	+0.0	-2.45	+35.96	-.00036	.001178	.00131
6	.601	+1.2	+4.03	+35.35	.00060	.001158	.00281
7	.601	+2.0	+18.86	+36.11	.00279	.001183	.02788
8	.601	+3.0	+53.02	+40.94	.00784	.001339	.11578
9	.601	+4.1	+102.62	+50.86	.01518	.001665	.25102
10	.600	+5.0	+149.02	+63.21	.02219	.002071	.35645
11	.600	+6.1	+204.72	+80.12	.03039	.002631	.44974
12	.600	+7.0	+266.41	+101.53	.03946	.003326	.52622
13	.600	+8.1	+341.82	+133.48	.05068	.004375	.58241
14	.600	+9.1	+398.54	+161.28	.05906	.005285	.60661
15	.599	+9.8	+445.12	+184.28	.06626	.006067	.62774
16	.600	+11.0	+526.92	+232.86	.07825	.007649	.63900
17	.600	+11.5	+552.08	+249.82	.08198	.008188	.63927
18	.600	+12.1	+589.88	+277.65	.08754	.009114	.63461
19	.602	+3.5	+74.75	+44.90	.01103	.001465	.17654
20	.601	+6.6	+248.31	+95.53	.03675	.003127	.50305
21	.601	+8.5	+359.99	+143.25	.05326	.004688	.58551
22	.601	+9.5	+427.81	+175.51	.06329	.005743	.61910
23	.600	+10.8	+514.65	+224.38	.07631	.007359	.63970
24	.600	+11.4	+552.16	+249.56	.08184	.008182	.63904
25	.601	-.0	+.24	+36.17	.00003	.001182	.00004
26	0.000	-.0	+.00	+.20	0.00000	0.000000	0.00000
27	0.000	-.0	+1.94	+146.61	0.00000	0.000000	0.00000
28	0.000	-.0	+1138.24	+92.41	0.00000	0.000000	0.00000
29	0.000	-.0	-.01	+.02	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 101 DATE :14 MARCH 1983 18103 OAT= 56 BAROMETER= 29.64 WET BULB TEMP= 45 DRY BULB TEMP= 56
WIND CONDITIONS :GUSTY 0 to 4 SOUTH Z/R= 3
SUMMARY:H-34 CAL RUN (SIMULATED OLD TRANSMISSION INSTALLED)

CONFIGURATION FILE : DATA1 H34[111]WTail/***INACTIVE***
DATA FILE : TIP101:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 54.24996 in. = 4.52083 ft.
CHORD : 4.250004 in. = .354167 ft.
SOLIDITY : .099247

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :2 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001147 +.86933(Ct)^1.5 +104.536(Ct)^3

STANDARD DEVIATION = 3.79605E-15
MEAN ERROR = -8.94737E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+6.26	+145.51	0.00000	0.000000	0.00000
2	0.000	+0.0	+1187.26	+92.20	0.00000	0.000000	0.00000
3	0.000	+0.0	-.98	+.46	0.00000	0.000000	0.00000
4	0.000	+0.0	-.98	+.05	0.00000	0.000000	0.00000
5	.602	+.1	+2.39	+35.37	.00035	.001152	.00128
6	.602	+1.1	+21.45	+36.68	.00315	.001193	.03316
7	.602	+2.1	+55.44	+41.66	.00816	.001357	.12140
8	.601	+3.1	+105.13	+51.43	.01550	.001678	.25697
9	.602	+4.1	+157.33	+65.92	.02317	.002148	.36685
10	.601	+5.1	+212.57	+83.12	.03139	.002715	.45744
11	.601	+6.0	+273.17	+105.82	.04030	.003453	.52316
12	.602	+7.0	+331.89	+131.00	.04893	.004272	.56579
13	.602	+8.0	+398.23	+162.39	.05870	.005295	.59989
14	.601	+9.1	+471.32	+201.04	.06970	.006576	.62488
15	.601	+10.0	+531.76	+235.48	.07843	.007683	.63850
16	.600	+10.5	+567.77	+257.79	.08401	.008438	.64451
17	.601	+9.5	+499.06	+216.33	.07370	.007066	.63230
18	.601	+8.6	+439.68	+182.54	.06488	.005959	.61929
19	.601	+7.5	+366.75	+145.53	.05410	.004748	.59180
20	.602	+6.5	+309.40	+118.73	.04562	.003872	.56193
21	.601	+5.4	+239.42	+91.83	.03539	.003002	.49519
22	.601	+4.5	+195.85	+73.88	.02742	.002411	.42053
23	.601	+.0	+3.72	+35.60	.00055	.001162	.00247
24	0.000	+.0	+.98	+.05	0.00000	0.000000	0.00000
25	0.000	+.0	+6.26	+145.85	0.00000	0.000000	0.00000
26	0.000	+.0	+1187.24	+92.55	0.00000	0.000000	0.00000
27	0.000	+.0	+.97	+.17	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 102 DATE :16 MARCH 1983 8126 OAT= 48.5 BAROMETER= 30.025 WET BULB TE
MP= 41 DRY BULB TEMP= 48.5
WIND CONDITIONS :LIGHT 0 to 3 NORTH Z/R= 3
SUMMARY:H-34 CAL RUN (NEW TORQUE CELL)

CONFIGURATION FILE : DATA12 H34(III)/wTail/New Torque
DATA FILE : TIP102:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 54.24996 in. = 4.52083 ft.
  CHORD : 4.250004 in. = .354167 ft.
  SOLIDITY : .099747

TAIL BLADE PROPERTIES :
  RADIUS : 11.499996 in. = .958333 ft.
  CHORD : 2.000004 in. = .166667 ft.
  SOLIDITY : .221433

PROCESSING DATE :12 APRIL 1984
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0004139 +.84178(Ct)^1.5 +127.292(Ct)^3

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+3.96	+143.99	0.00000	0.000000	0.00000
2	0.000	+0.0	+1186.98	+388.24	0.00000	0.000000	0.00000
3	0.000	+0.0	-1.25	+.11	0.00000	0.000000	0.00000
4	0.000	+0.0	-.06	+.58	0.00000	0.000000	0.00000
5	.601	+.1	+2.24	+35.09	.00033	.001130	.00116
6	.602	+2.0	+93.94	+41.11	.00784	.001322	.11730
7	.601	+3.1	+181.81	+50.78	.01471	.001636	.24359
8	.601	+4.1	+158.52	+64.72	.02312	.002088	.37598
9	.601	+5.0	+209.95	+80.86	.03060	.002607	.45860
10	.601	+6.1	+282.68	+106.98	.04121	.003450	.54152
11	.601	+7.1	+346.00	+133.57	.05045	.004308	.58743
12	.601	+7.1	+339.33	+131.77	.04952	.004253	.57856
13	.601	+8.1	+412.32	+164.06	.06014	.005290	.62258
14	.600	+9.1	+476.12	+198.25	.06959	.006409	.63964
15	.601	+10.0	+537.42	+234.91	.07842	.007583	.64682
16	.600	+9.5	+501.88	+214.60	.07335	.006938	.63948
17	.601	+8.5	+444.73	+181.02	.06492	.005845	.63200
18	.601	+7.5	+371.35	+145.88	.05413	.004704	.59796
19	.601	+6.5	+304.46	+117.20	.04436	.003777	.55240
20	.601	+5.6	+258.69	+94.62	.03654	.003051	.51130
21	.601	+4.6	+194.13	+75.14	.02835	.002427	.43915
22	.600	+3.5	+136.39	+57.98	.01993	.001874	.33531
23	.601	+2.5	+91.85	+48.19	.01326	.001552	.21965
24	.601	+1.5	+46.88	+39.92	.00682	.001286	.09774
25	.601	+1.1	+31.63	+37.75	.00452	.001216	.05560
26	.601	+9.0	+475.81	+196.93	.06940	.006354	.64263
27	.600	+10.0	+531.99	+232.56	.07756	.007529	.64442
28	.600	+9.5	+496.42	+213.27	.07260	.006899	.63321
29	.601	+.0	+4.38	+35.13	.00064	.001134	.00319
30	0.000	+.0	+.06	+.58	0.00000	0.000000	0.00000
31	0.000	+.0	+3.94	+144.66	0.00000	0.000000	0.00000
32	0.000	+.0	+1187.63	+387.69	0.00000	0.000000	0.00000
33	0.000	+.0	+.05	+.46	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 103 DATE :16 MARCH 1983 OAT= 55 BAROMETER= 30.03 WET BULB TEMP= 49 DRY BULB TEMP= 54
WIND CONDITIONS :LIGHT GUSTS TO 3 FROM NE R= 3
SUMMARY:H-34 CALIBRATION RUN WITH SIMULATED OLD BMTR TORQUE BRACKET

CONFIGURATION FILE : DATA12 H34[III]<WTail<New Torque
DATA FILE : TIP103:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 54.249996 in. = 4.52083 ft.
  CHORD : 4.250004 in. = .354167 ft.
  SOLIDITY : .099747

TAIL BLADE PROPERTIES :
  RADIUS : 11.499996 in. = .958333 ft.
  CHORD : 2.000004 in. = .166667 ft.
  SOLIDITY : .221433

PROCESSING DATE :2 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001144 +.84620(Ct)^1.5 +185.320(Ct)^3

STANDARD DEVIATION = 3.92301E-15
MEAN ERROR = -9.00000E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+5.29	+140.62	0.00000	0.000000	0.00000
2	0.000	+0.0	+1186.25	+307.52	0.00000	0.000000	0.00000
3	0.000	-0.0	+.01	+.83	0.00000	0.000000	0.00000
4	0.000	+0.0	+.01	+.20	0.00000	0.000000	0.00000
5	.600	+.1	+3.45	+35.83	.00050	.001159	.00219
6	.599	+0.5	+425.87	+176.13	.06247	.005715	.61016
7	.601	+2.0	+54.82	+41.63	.00801	.001345	.11897
8	.600	+3.0	+95.87	+49.68	.01405	.001610	.23095
9	.601	+4.0	+156.19	+64.09	.02277	.002066	.37128
10	.600	+5.1	+218.14	+83.16	.03193	.002692	.47325
11	.601	+6.0	+277.58	+104.82	.04052	.003385	.53814
12	.600	+7.0	+338.94	+130.18	.04960	.004214	.58546
13	.601	+8.0	+409.36	+162.06	.05976	.005233	.62343
14	.600	+9.0	+472.23	+194.61	.06907	.006296	.64387
15	.601	+10.0	+535.98	+232.31	.07823	.007500	.65158
16	.600	+9.5	+507.87	+215.48	.07428	.006972	.64955
17	.600	+8.5	+441.29	+179.71	.06448	.005809	.62954
18	.600	+7.5	+377.26	+146.98	.05514	.004749	.60884
19	.601	+6.5	+307.95	+117.96	.04489	.003804	.55846
20	.601	+5.5	+247.31	+94.02	.03602	.003029	.50399
21	.601	+4.5	+198.34	+73.92	.02774	.002383	.43304
22	.601	+3.5	+135.58	+59.20	.01976	.001909	.32700
23	.601	+2.4	+84.37	+46.94	.01231	.001515	.20134
24	.601	-.0	+5.81	+35.41	.00085	.001142	.00482
25	0.000	-.0	-.01	+.20	0.00000	0.000000	0.00000
26	0.000	-.0	+5.29	+141.06	0.00000	0.000000	0.00000
27	0.000	-.0	+1187.84	+307.46	0.00000	0.000000	0.00000
28	0.000	-.0	-.01	+1.05	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 104 DATE :22 MARCH 1983 OAT= 44 BAROMETER= 29.424 WET BULB TEMP= 40 D
RY BULB TEMP= 43.5
WIND CONDITIONS :LIGHT FROM NNW Z/R= 3
SUMMARY:H-34 CALIBRATION RUN / VARI-DRIVE / AFTER RE-INSTALLATION OF MOTOR

CONFIGURATION FILE : DATA12 H34[111]/wTail/New Torque
DATA FILE : TIP104:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 54.24998 in. = 4.52083' ft.
CHORD : 4.250004 in. = .354167 ft.
SOLIDITY : .099747

TAIL BLADE PROPERTIES :
RADIUS : 11.499998 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :2 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001136 +.93206(Ct)^1.5 +187.219(Ct)^3

STANDARD DEVIATION = 5.89494E-15
MEAN ERROR = -1.84000E-19

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+2.31	+144.04	0.00000	0.000000	0.00000
2	0.000	+0.0	+1185.96	+387.19	0.00000	0.000000	0.00000
3	0.000	+0.0	-2.27	+1.17	0.00000	0.000000	0.00000
4	0.000	+0.0	-2.27	+.05	0.00000	0.000000	0.00000
5	.602	-.0	+1.46	+34.89	-.00022	.001144	.00062
6	.601	+2.0	+53.06	+40.75	.00789	.001341	.11682
7	.602	+2.9	+97.52	+49.80	.01447	.001635	.23778
8	.601	+3.9	+153.44	+62.45	.02280	.002053	.37459
9	.601	+4.9	+211.38	+80.53	.03145	.002650	.46999
10	.601	+5.9	+272.53	+102.84	.04052	.003382	.53854
11	.600	+7.1	+342.58	+132.59	.05113	.004377	.58982
12	.601	+8.0	+402.58	+159.44	.05993	.005251	.62407
13	.601	+8.9	+469.67	+193.01	.06982	.006347	.64920
14	.601	+9.9	+530.63	+227.78	.07891	.007493	.66069
15	.600	+9.9	+529.97	+227.86	.07917	.007529	.66071
16	.600	+9.4	+500.00	+210.60	.07459	.006950	.65466
17	.602	+8.9	+473.28	+193.63	.07023	.006356	.65395
18	.603	+8.4	+440.29	+176.00	.06511	.005757	.64449
19	.602	+7.9	+404.62	+159.69	.06008	.005245	.62702
20	.601	+7.4	+372.40	+145.16	.05535	.004772	.60935
21	.601	+6.9	+338.28	+129.86	.05029	.004270	.58980
22	.602	+6.4	+308.16	+114.86	.04573	.003771	.57926
23	.602	+6.0	+280.86	+104.06	.04173	.003420	.55667
24	.602	+5.5	+251.83	+93.05	.03734	.003052	.52798
25	.602	+4.9	+220.47	+82.62	.03275	.002715	.48760
26	.602	+4.4	+188.49	+72.44	.02799	.002380	.43948
27	.601	+3.5	+138.73	+58.19	.02063	.001915	.34572
28	.601	+1.5	+49.81	+39.29	.00742	.001295	.11027
29	.601	-.1	+4.85	+34.58	.00072	.001137	.00380
30	0.000	-.1	+2.27	+.05	0.00000	0.000000	0.00000
31	0.000	-.1	+4.87	+144.45	0.00000	0.000000	0.00000
32	0.000	-.1	+1188.55	+387.41	0.00000	0.000000	0.00000
33	0.000	-.1	+2.27	+.82	0.00000	0.000000	0.00000

RUN # : 105 DATE :22 MARCH 1983 OAT= 36 BAROMETER= 29.681 WET BULB TEMP= 30.5
DRY BULB TEMP= 35
WIND CONDITIONS :LIGHT GUSTS FROM WEST 2 R= 3
SUMMARY:CALIBRATION RUN

CONFIGURATION FILE : DATA12 H34(III)-wTail New Torque
DATA FILE : TIP105:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 54.24996 in. = 4.52083 ft.
CHORD : 4.250004 in. = .354167 ft.
SOLIDITY : .099747

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :2 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001151 +.83683(Ct)^1.5 +120.306(Ct)^3

STANDARD DEVIATION = 1.371715E-15
MEAN ERROR = -2.000006E-16

Pt.	Tip Mθ	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+1.12	+144.69	0.00000	0.000000	0.00000
2	0.000	+0.0	+1187.04	+307.47	0.00000	0.000000	0.00000
3	0.000	+0.0	-1.19	+.88	0.00000	0.000000	0.00000
4	0.000	+0.0	+.80	+.09	0.00000	0.000000	0.00000
5	.600	-.0	-.78	+34.67	-.00011	.001134	.00024
6	.600	+2.0	+37.52	+38.61	.00555	.001263	.07309
7	.600	+3.0	+77.77	+45.90	.01150	.001502	.18346
8	.600	+4.1	+126.96	+57.50	.01877	.001882	.30515
9	.600	+5.0	+186.28	+73.37	.02752	.002398	.42521
10	.600	+6.1	+245.83	+93.83	.03636	.003070	.50442
11	.600	+7.1	+311.48	+119.69	.04607	.003916	.56393
12	.600	+8.0	+373.44	+145.13	.05522	.004747	.61042
13	.599	+9.0	+435.80	+175.93	.06464	.005772	.63586
14	.600	+10.1	+508.20	+216.33	.07531	.007091	.65086
15	.600	+10.6	+531.82	+233.01	.07867	.007624	.64633
16	.600	+10.0	+499.95	+212.13	.07399	.006945	.64726
17	.600	+9.5	+467.57	+195.23	.06907	.006380	.63550
18	.600	+9.1	+443.96	+180.63	.06569	.005912	.63600
19	.601	+8.5	+400.62	+160.05	.05908	.005221	.61425
20	.600	+8.0	+364.13	+143.59	.05386	.004700	.59427
21	.600	+7.4	+333.79	+127.70	.04938	.004179	.58644
22	.600	+7.0	+314.45	+119.35	.04653	.003906	.57377
23	.600	+6.5	+283.99	+106.86	.04205	.003500	.55019
24	.600	+5.5	+220.37	+83.57	.03256	.002731	.49039
25	.600	+4.5	+154.73	+64.13	.02290	.002099	.36862
26	.600	+3.5	+108.64	+52.13	.01609	.001706	.26689
27	.600	+2.5	+65.35	+42.72	.00967	.001398	.15186
28	.600	+1.5	+30.55	+37.19	.00452	.001218	.05578
29	.600	+.0	+.68	+34.47	.00010	.001128	.00020
30	0.000	+.0	-.80	+.09	0.00000	0.000000	0.00000
31	0.000	+.0	+1.12	+144.59	0.00000	0.000000	0.00000
32	0.000	+.0	+1185.04	+307.53	0.00000	0.000000	0.00000
33	0.000	+.0	-.80	+.64	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 106 DATE :23 MARCH 1983 9:00 OAT= 34 BAROMETER= 29.825 WET BULB TEMP = 32 DRY BULB TEMP= 33
WIND CONDITIONS :LIGHT FROM THE SOUTH Z/R= 3
SUMMARY: ISOLATED TAIL/PUSHER MODE/REPEAT OF TIP 086

CONFIGURATION FILE : DATA10 $76[[[]wEXT/wTail/New Torque
DATA FILE : TIP106:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.099996 in. = .258333 ft.
SOLIDITY : .0704325

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :3 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0002916 +1.09128(Ct)^1.5 -.404(Ct)^3

STANDARD DEVIATION = 7.98220E-15
MEAN ERROR = 2.13333E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-2.17	+.00	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.05	+258.65	0.00000	0.000000	0.00000
3	0.000	+0.0	+.62	+.54	0.00000	0.000000	0.00000
4	0.000	+0.0	+.37	+.04	0.00000	0.000000	0.00000
5	0.000	+0.0	-.37	+.04	0.00000	0.000000	0.00000
6	.596	+9.2	+17.34	+2.30	.02597	.003600	.38674
7	.598	+12.4	+27.87	+3.61	.04139	.005602	.50011
8	.597	+14.9	+39.04	+5.29	.05822	.008230	.56902
9	.594	+15.7	+48.78	+7.30	.07333	.011454	.57684
10	.599	+17.8	+54.79	+8.25	.08100	.012722	.60289
11	.599	+17.8	+55.76	+8.87	.08252	.013694	.57602
12	.597	+16.0	+49.49	+7.58	.07365	.011764	.56536
13	.604	+15.8	+45.13	+6.63	.06569	.010070	.55640
14	.605	+13.8	+41.39	+6.18	.06014	.009249	.53061
15	.597	+8.9	+34.94	+4.74	.05199	.007356	.53625
16	.596	+11.2	+26.79	+3.62	.04007	.005652	.47214
17	.605	+9.6	+21.65	+2.68	.03146	.004068	.45629
18	.600	+5.3	+16.87	+1.83	.02487	.002916	.46342
19	.603	+4.8	+8.31	+1.30	.01212	.001978	.22441
20	.598	+1.1	+1.42	+1.06	.00211	.001640	.01962
21	0.000	+0.0	-.00	+.00	0.00000	0.000000	0.00000
22	0.000	+0.0	-1.95	+.95	0.00003	0.000000	0.00000
23	0.000	+0.0	-564.57	+258.34	0.00000	0.000000	0.00000
24	0.000	+0.0	-.00	+.00	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 107 DATE :23 MARCH 1983 OAT= 36 BAROMETER= 29.939 WET BULB TEMP= 29 D
RY BULB TEMP= 35
WIND CONDITIONS :GUSTY-0-4 SSW Z/R= 3
SUMMARY:S-76 MAIN WITH 20degSWEEP%60% TAPER % 20 deg ANHEDRAL / REPEAT OF TIP078

CONFIGURATION FILE : DATA10 S76[[[]wEKT/wTail/New Torque
DATA FILE : TIP107:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 56.04 in. = 4.67 ft.
  CHORD : 3.099996 in. = .258333 ft.
  SOLIDITY : .0704329

TAIL BLADE PROPERTIES :
  RADIUS : 11.499996 in. = .958333 ft.
  CHORD : 2.000004 in. = .166667 ft.
  SOLIDITY : .221433

PROCESSING DATE :3 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000907 +.67639(Ct)^1.5 +249.989(Ct)^3

STANDARD DEVIATION = 1.72177E-15
MEAN ERROR = -3.95000E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+.18	+144.99	0.00000	0.000000	0.00000
2	0.000	+0.0	+1188.06	+307.47	0.00000	0.000000	0.00000
3	0.000	+0.0	-.18	+.88	0.00000	0.000000	0.00000
4	.601	+.5	-4.52	+31.87	0.00000	0.000000	0.00000
5	0.000	+.5	+.98	+.17	0.00000	0.000000	0.00000
6	0.000	+.5	-.98	+.17	0.00000	0.000000	0.00000
7	.601	+.8	+1.14	+31.82	.00022	.001327	.00047
8	.600	+2.1	+65.53	+36.26	.01278	.001514	.17904
9	.601	+3.2	+105.03	+43.40	.02046	.001810	.30333
10	.601	+4.0	+141.91	+50.12	.02763	.002090	.41246
11	.600	+5.0	+182.72	+61.36	.03567	.002565	.49287
12	.600	+6.0	+234.80	+75.95	.04582	.003174	.57994
13	.601	+7.0	+291.43	+93.75	.05673	.003908	.64888
14	.600	+8.0	+336.00	+113.04	.06552	.004720	.66675
15	.600	+9.1	+397.34	+138.15	.07762	.005778	.70224
16	.601	+10.1	+442.12	+159.21	.08611	.006640	.71418
17	.600	+11.1	+510.81	+196.93	.09980	.008238	.71812
18	.600	+12.0	+562.86	+229.40	0.00000	0.000000	0.00000
19	.600	+12.4	+581.97	+244.07	0.00000	0.000000	0.00000
20	.599	+12.1	+563.56	+231.14	0.00000	0.000000	0.00000
21	.599	+11.5	+539.05	+215.07	0.00000	0.000000	0.00000
22	.600	+11.2	+527.20	+203.81	.10291	.008519	.72721
23	.601	+10.7	+497.35	+187.76	.09681	.007826	.72229
24	.600	+9.5	+433.85	+152.84	.08467	.006387	.72391
25	.600	+8.5	+378.58	+128.55	.07386	.005379	.70144
26	.600	+7.5	+325.70	+106.04	.06355	.004431	.67854
27	.600	+6.5	+270.56	+88.04	.05277	.003677	.61865
28	.601	+5.5	+219.86	+72.20	.04278	.003009	.55202
29	.600	+4.5	+169.63	+57.30	.03308	.002393	.47183
30	.600	+.0	+1.93	+31.31	.00038	.001308	.00185
31	0.000	+.0	-.34	+.20	0.00000	0.000000	0.00000
32	0.000	+.0	+1.51	+145.19	0.00000	0.000000	0.00000
33	0.000	+.0	+1187.50	+307.82	0.00000	0.000000	0.00000
34	0.000	+.0	-.34	+.51	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 100 DATE :23 ARCH 1983 OAT= 38 BAROMETER= 29.83 WET BULB TEMP= 30 DRY BULB TEMP= 37
WIND CONDITIONS :GUSTY $SW-0-4 Z/R= 3
SUMMARY:PUSHER TAIL AND S-76 MAIN WITH 20deg SWEEP & 60% TAPER & 20deg ANHEDRAL / REPEAT OF TIP090

CONFIGURATION FILE : DATA10 S76[III]WEXT/wTail/New Torque
DATA FILE : TIP100:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 56.04 in. = 4.67 ft.
  CHORD : 3.099996 in. = .258333 ft.
  SOLIDITY : .0704325

TAIL BLADE PROPERTIES :
  RADIUS : 11.499996 in. = .958333 ft.
  CHORD : 2.000004 in. = .166667 ft.
  SOLIDITY : .221433

PROCESSING DATE :2 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000926 +.66929(Ct)^1.5 +314.869(Ct)^3

STANDARD DEVIATION = 4.33710E-15
MEAN ERROR = 9.95000E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+2.51	+144.84	0.00000	0.000000	0.00000
2	0.000	+0.0	+1198.23	+307.64	0.00000	0.000000	0.00000
3	0.000	+0.0	+.00	+.71	0.00000	0.000000	0.00000
4	0.000	+0.0	-.00	+0.00	0.00000	0.000000	0.00000
5	.600	+.0	+4.89	+31.48	.00096	.001318	.00421
6	.600	+.0	+3.95	+31.15	.00077	.001305	.00309
7	.600	+2.0	+61.83	+36.77	.01209	.001540	.16203
8	.600	+4.0	+136.53	+50.34	.02670	.002107	.30853
9	.600	+6.0	+231.34	+77.01	.04525	.003225	.56000
10	.600	+8.0	+338.41	+114.39	.06619	.004791	.66700
11	.600	+10.1	+448.03	+162.91	.08763	.006823	.71347
12	.600	+12.0	+544.51	+224.81	.10650	.009415	.69270
13	.600	+12.0	+548.63	+225.70	.10730	.009452	.69782
14	.600	+11.5	+515.93	+207.73	.10091	.008700	.69141
15	.600	+11.0	+491.08	+192.70	.09605	.008070	.69215
16	.600	+10.5	+469.99	+175.83	.09192	.007364	.71022
17	.600	+9.4	+416.58	+149.58	.08148	.006261	.69704
18	.600	+9.4	+413.53	+149.52	.08088	.006262	.68930
19	.600	+8.5	+369.25	+127.41	.07222	.005336	.68253
20	.600	+7.5	+310.01	+104.05	.06063	.004358	.64295
21	.600	+6.5	+260.44	+86.00	.05094	.003602	.59900
22	.600	+5.5	+216.98	+71.41	.04244	.002991	.54853
23	.600	+4.5	+165.76	+57.74	.03242	.002418	.45299
24	.600	+.0	-2.42	+30.87	-.00047	.001293	.00149
25	0.000	+.0	+.00	+0.00	0.00000	0.000000	0.00000
26	0.000	+.0	+2.51	+144.86	0.00000	0.000000	0.00000
27	0.000	+.0	+1198.21	+307.64	0.00000	0.000000	0.00000
28	0.000	+.0	-.00	+.61	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0003276 +1.41622(Ct/)^1.5 -124.006(Ct/)^3

STANDARD DEVIATION = 1.72177E-14
MEAN ERROR = -3.95000E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-2.09	+1.09	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.67	+259.36	0.00000	0.000000	0.00000
3	0.000	+0.0	+.00	+.17	0.00000	0.000000	0.00000
4	0.000	+0.0	+0.00	+0.00	0.00000	0.000000	0.00000
5	.600	+3.6	+3.54	+1.27	.00522	.001958	.06414
6	.600	+4.3	+6.32	+1.32	.00933	.002040	.14708
7	.600	+5.3	+5.30	+1.26	.00783	.001968	.11704
8	.600	+6.9	+8.94	+1.45	.01320	.002226	.22663
9	.600	+8.5	+13.66	+2.52	.02016	.003873	.24584
10	.600	+10.8	+19.84	+3.41	.02928	.005255	.31721
11	.600	+6.9	+28.47	+4.08	.04201	.006275	.45659
12	.600	+12.6	+40.81	+6.49	.06023	.010002	.49176
13	.600	+11.0	+40.32	+6.48	.05950	.009979	.48393
14	.600	+9.4	+39.91	+6.31	.05890	.009722	.48920
15	.600	+8.1	+35.12	+5.79	.05183	.008918	.44029
16	.600	+10.9	+32.15	+4.65	.04745	.007157	.48054
17	.600	+11.1	+23.64	+3.71	.03489	.005710	.37984
18	.600	+11.6	+28.87	+4.29	.04142	.006589	.42570
19	.600	+9.2	+21.82	+3.49	.03220	.005377	.35764
20	.600	+8.3	+16.14	+2.53	.02382	.003902	.31359
21	.600	+7.8	+16.06	+2.47	.02370	.003806	.31907
22	.600	+5.6	+13.54	+1.86	.01998	.002860	.32948
23	.600	+2.6	+9.43	+1.41	.01391	.002167	.25203
24	.600	+3.8	+5.69	+1.26	.00834	.001947	.13014
25	0.000	+3.0	+0.00	+0.00	0.00000	0.000000	0.00000
26	0.000	+3.0	-2.33	+1.24	0.00000	0.000000	0.00000
27	0.000	+3.0	-564.62	+259.22	0.00000	0.000000	0.00000
28	0.000	+3.0	-.00	+.14	0.00000	0.000000	0.00000

EMPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 109 DATE :23 MARCH 1983 OAT= 39 BAROMETER= 29.795 WET BULB TEMP= 39 D
RY BULB TEMP= 29.795
WIND CONDITIONS :GUSTY WSW 0-4 Z/R= 3
SUMMARY:ISOLATED TRACTOR TAIL ROTOR

CONFIGURATION FILE : DATA10 $76[[[]WEXT/WTail/New Torque
DATA FILE : TIP109:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 56.04 in. = 4.67 ft.
  CHORD : 3.099996 in. = .258333 ft.
  SOLIDITY : .0784325

TAIL BLADE PROPERTIES :
  RADIUS : 11.499996 in. = .958333 ft.
  CHORD : 2.000004 in. = .166667 ft.
  SOLIDITY : .221433

PROCESSING DATE :2 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0003743 +1.57260(Ct)^1.5 -76.724(Ct)^3

STANDARD DEVIATION = 1.52683E-13
MEAN ERROR = -3.33182E-14

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-2.58	+1.65	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.66	+258.81	0.00000	0.000000	0.00000
3	0.000	+0.0	+.01	+.38	0.00000	0.000000	0.00000
4	0.000	+0.0	+.01	+.38	0.00000	0.000000	0.00000
5	.550	+.5	+.12	+.67	.00021	.001240	.00084
6	.550	+2.6	+.91	+.70	.00161	.001296	.01667
7	.550	+4.2	+3.20	+1.49	.00564	.002744	.05136
8	.550	+6.1	+7.30	+1.58	.01288	.002906	.16733
9	.550	+8.3	+13.40	+2.58	.02363	.004749	.25453
10	.550	+10.5	+20.87	+3.74	.03681	.006885	.34130
11	.550	+12.2	+26.54	+4.96	.04682	.009135	.36896
12	.550	+14.5	+37.28	+7.06	.06575	.013000	.43148
13	.550	+16.6	+46.53	+9.31	.08206	.017132	.45656
14	.550	+18.3	+40.48	+7.86	.07140	.014464	.43884
15	.550	+14.2	+35.18	+6.67	.06204	.012281	.41867
16	.550	+13.3	+31.45	+5.41	.05546	.009948	.43699
17	.550	+12.0	+27.49	+5.13	.04848	.009446	.37600
18	.550	+10.9	+22.46	+3.92	.03961	.007209	.36388
19	.550	+10.1	+21.57	+3.81	.03804	.007003	.35247
20	.550	+8.9	+16.99	+2.72	.02997	.005011	.34450
21	.550	+7.5	+12.47	+2.29	.02200	.004211	.25700
22	.550	+6.6	+8.51	+1.52	.01502	.002801	.21960
23	.550	+5.7	+6.90	+1.51	.01217	.002774	.16101
24	.550	+3.8	+4.63	+1.40	.00817	.002570	.09562
25	.550	+1.7	+1.93	+1.09	.00340	.002003	.03288
26	.550	+.8	+.79	+.64	.00138	.001177	.01447
27	0.000	-.8	-.01	+.38	0.00000	0.000000	0.00000
28	0.000	-.8	-2.11	+1.84	0.00000	0.000000	0.00000
29	0.000	-.8	-564.67	+259.47	0.00000	0.000000	0.00000
30	0.000	-.8	-.01	+.40	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 110 DATE :23 MARCH 1983 OAT= 39 BAROMETER= 29.785 WET BULB TEMP= 32.5
DRY BULB TEMP= 3'
WIND CONDITIONS :GUSTY WSW 0-4 Z/R= 3
$UMMARY:ISOLATED TRACTOR TAIL ROTOR

CONFIGURATION FILE : DATA10 876[[[]WEXT/WTail/New Torque
DATA FILE : TIP110:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.099996 in. = .258333 ft.
SOLIDITY : .0704325

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :2 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0003283 +1.15564(Ct)^1.5 +194.915(Ct)^3

STANDARD DEVIATION = 5.66573E-14
MEAN ERROR = -1.23636E-14

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-2.57	+2.06	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.67	+259.21	0.00000	0.000000	0.00000
3	0.000	+0.0	-.00	+.01	0.00000	0.000000	0.00000
4	0.000	+0.0	+0.00	+0.00	0.00000	0.000000	0.00000
5	.600	+.0	+.63	+1.09	.00094	.001684	.00565
6	.600	+.6	+.53	+1.09	.00079	.001683	.00435
7	.600	+1.7	+.77	+.79	.00114	.001220	.01052
8	.600	+4.3	+2.78	+1.14	.00410	.001749	.04998
9	.600	+4.9	+6.89	+1.22	.01017	.001871	.18230
10	.600	+6.6	+12.90	+2.13	.01904	.003287	.26587
11	.600	+8.0	+17.00	+2.47	.02509	.003809	.34712
12	.600	+9.7	+23.90	+3.65	.03528	.005617	.39250
13	.600	+11.3	+31.42	+5.44	.04637	.008384	.39628
14	.600	+13.4	+38.06	+7.35	.05617	.011317	.39141
15	.600	+15.3	+52.28	+10.81	.07714	.016651	.42817
16	.600	+14.2	+48.58	+9.81	.07165	.015106	.42247
17	.600	+13.0	+43.77	+7.60	.06459	.011708	.46656
18	.600	+12.0	+39.35	+6.25	.05808	.009626	.48382
19	.600	+10.8	+31.64	+4.65	.04669	.007156	.46908
20	.600	+10.0	+31.64	+4.96	.04669	.007635	.43962
21	.600	+8.4	+23.77	+3.47	.03508	.005348	.40889
22	.600	+6.6	+17.15	+2.39	.02531	.003682	.36378
23	.600	+4.7	+11.76	+1.62	.01735	.002489	.30552
24	.600	+2.5	+6.62	+1.13	.00977	.001734	.18525
25	.600	+.8	+2.79	+1.02	.00411	.001570	.05585
26	.600	-.8	+.87	+1.08	.00128	.001668	.00917
27	0.000	-.4	+0.00	+0.00	0.00000	0.000000	0.00000
28	0.000	-.4	-2.57	+2.06	0.00000	0.000000	0.00000
29	0.000	-.4	-564.66	+259.21	0.00000	0.000000	0.00000
30	0.000	-.4	-.00	+.04	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 111 DATE :23 MARCH 1983 OAT= 38 BAROMETER= 29.819 WET BULB TEMP= 33 D
RY BULB TEMP= 38
WIND CONDITIONS :GUSTY SSW 0-4 Z/R= 3
SUMMARY:ISOLATED TRACTOR TAIL ROTOR

CONFIGURATION FILE : DATA10 S76CIII:WEXT/wTail/New Torque
DATA FILE : TIP111:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 56.04 in. = 4.67 ft.
  CHORD : 3.099996 in. = .258333 ft.
  SOLIDITY : .0704325

TAIL BLADE PROPERTIES :
  RADIUS : 11.499996 in. = .958333 ft.
  CHORD : 2.000004 in. = .166667 ft.
  SOLIDITY : .221433

PROCESSING DATE :2 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0003345 +1.28357(Ct)^1.5 +109.287(Ct)^3

STANDARD DEVIATION = 4.35212E-15
MEAN ERROR = -1.05556E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-2.57	+2.01	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.72	+259.25	0.00000	0.000000	0.00000
3	0.000	+0.0	-.05	+.05	0.00000	0.000000	0.00000
4	0.000	+0.0	-.00	+.05	0.00000	0.000000	0.00000
5	.647	+.1	+.13	+1.12	.00016	.001480	.00046
6	.647	+.5	+.88	+1.17	.00112	.001550	.00802
7	.647	+2.6	+1.92	+1.18	.00244	.001562	.02564
8	.647	+7.0	+8.88	+1.82	.01120	.002411	.16353
9	.647	+9.0	+14.89	+2.42	.01893	.003212	.26992
10	.647	+11.2	+25.05	+3.74	.03186	.004959	.38163
11	.647	+13.0	+33.13	+5.48	.04213	.007173	.40119
12	.647	+15.2	+43.78	+7.98	.05568	.010587	.41288
13	.647	+14.0	+41.48	+7.13	.05265	.009458	.42498
14	.647	+12.2	+30.54	+4.92	.03884	.006524	.39837
15	.647	+11.0	+30.28	+4.36	.03852	.005781	.43511
16	.647	+9.8	+25.69	+4.04	.03267	.005361	.36651
17	.647	+8.6	+22.23	+3.50	.02827	.004647	.34029
18	.647	+7.8	+21.25	+3.46	.02703	.004591	.32200
19	.647	+8.8	+14.37	+2.39	.01828	.003169	.25940
20	.647	+6.6	+9.43	+1.83	.01199	.002427	.18004
21	.647	+3.6	+5.58	+1.22	.00710	.001618	.12296
22	.647	+1.5	+1.81	+1.04	.00230	.001385	.02649
23	0.000	+0.0	+.00	+.05	0.00000	0.000000	0.00000
24	0.000	+0.0	-2.26	+2.11	0.00000	0.000000	0.00000
25	0.000	+0.0	-564.25	+259.36	0.00000	0.000000	0.00000
26	0.000	+0.0	-.00	+.05	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 112 DATE :23 MARCH 1983 OAT= 36 BAROMETER= 29.82 WET BULB TEMP= 32 DR
Y BULB TEMP= 36
WIND CONDITIONS :LIGHT GUSTS W 0-4 Z-R= 3
SUMMARY:S-76 MAIN ROTOR WITH 20deg SWEEP/60% TAPER AND 20deg ANHEDRAL - TRACTOR
TAIL ROTOR

CONFIGURATION FILE : DATA10 $76[[[[wEXT/wTail/New Torque
DATA FILE : TIP112:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.099996 in. = .258333 ft.
SOLIDITY : .0704325

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :2 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000912 +.70962(Ct)^1.5 +200.949(Ct)^3

STANDARD DEVIATION = 1.50909E-15
MEAN ERROR = 3.21739E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+2.41	+145.23	0.00000	0.000000	0.00000
2	0.000	+0.0	+1188.08	+387.76	0.00000	0.000000	0.00000
3	0.000	+0.0	-.15	+.59	0.00000	0.000000	0.00000
4	0.000	+0.0	+.12	+.04	0.00000	0.000000	0.00000
5	.551	+.0	-1.93	+26.78	-.00045	.001327	.00134
6	.551	+.0	-2.24	+26.54	-.00052	.001319	.00169
7	.551	+2.0	+52.90	+31.08	.01227	.001544	.16522
8	.551	+3.0	+82.66	+36.48	.01915	.001806	.27545
9	.551	+4.0	+114.93	+42.81	.02663	.002124	.38391
10	.551	+5.0	+154.13	+51.59	.03571	.002559	.49470
11	.551	+5.0	+151.30	+51.76	.03506	.002568	.47967
12	.551	+6.0	+194.79	+63.71	.04516	.003163	.56943
13	.550	+7.0	+238.90	+78.27	.05564	.003904	.63092
14	.550	+7.0	+236.01	+77.50	.05484	.003856	.62494
15	.550	+7.0	+232.65	+77.06	.05405	.003833	.61514
16	.551	+8.0	+276.32	+93.73	.06409	.004655	.65403
17	.551	+9.0	+321.19	+112.48	.07443	.005582	.68273
18	.550	+10.0	+365.90	+134.27	.08495	.006675	.69684
19	.551	+11.0	+412.45	+157.00	.09570	.007801	.71225
20	.550	+12.0	+461.53	+185.28	0.00000	0.000000	0.00000
21	.551	+12.5	+481.59	+198.83	0.00000	0.000000	0.00000
22	.550	+12.0	+456.50	+183.05	0.00000	0.000000	0.00000
23	.550	+11.5	+435.96	+168.62	.10131	.008391	.72118
24	.551	+11.0	+415.13	+155.29	.09624	.007709	.72679
25	.551	+10.5	+391.35	+144.07	.09067	.007148	.71683
26	.551	+9.5	+345.59	+122.57	.08008	.006081	.69925
27	.551	+8.4	+302.36	+102.48	.07013	.005090	.68474
28	.552	+7.4	+253.78	+84.62	.05864	.004187	.63640
29	.551	+6.4	+216.93	+71.17	.05027	.003532	.59890
30	.551	-.0	+2.36	+26.27	.00055	.001305	.00184
31	0.000	-.0	-.12	+.04	0.00000	0.000000	0.00000
32	0.000	-.0	+2.41	+145.23	0.00000	0.000000	0.00000
33	0.000	-.0	+1188.09	+387.94	0.00000	0.000000	0.00000
34	0.000	-.0	-.12	+.49	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0004067 +1.59345(Ct)^1.5 +29.728(Ct)^3

STANDARD DEVIATION = 1.570276-14
MEAN ERROR = -3.34783E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-2.58	+1.63	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.72	+259.55	0.00000	0.000000	0.00000
3	0.000	+0.0	-.05	+.35	0.00000	0.000000	0.00000
4	0.000	+0.0	+.00	+.33	0.00000	0.000000	0.00000
5	.563	+.1	+.62	+.73	.00184	.001272	.00974
6	.563	+4.9	+5.62	+1.55	.00943	.002715	.11223
7	.563	+4.9	+5.95	+1.58	.00999	.002760	.12039
8	.563	+4.9	+5.49	+1.42	.00921	.002483	.11848
9	.563	+5.3	+6.77	+1.58	.01136	.002765	.14567
10	.563	+5.2	+7.93	+1.65	.01263	.002893	.16393
11	.563	+6.5	+10.09	+1.96	.01694	.003423	.21428
12	.563	+7.5	+12.14	+2.25	.02037	.003938	.24569
13	.563	+7.8	+12.94	+2.63	.02171	.004608	.23183
14	.563	+7.8	+13.66	+2.59	.02292	.004528	.25498
15	.563	+7.8	+13.45	+2.43	.02257	.004255	.26521
16	.563	+9.0	+16.75	+3.05	.02811	.005348	.29329
17	.563	+9.6	+18.55	+3.71	.03113	.006497	.28175
18	.563	+10.8	+23.02	+4.21	.03862	.007366	.34287
19	.563	+11.8	+25.73	+5.12	.04318	.008962	.33310
20	.563	+13.3	+31.92	+6.20	0.00000	0.000000	0.00000
21	.563	+15.1	+37.51	+8.32	0.00000	0.000000	0.00000
22	.563	+13.7	+34.46	+7.37	0.00000	0.000000	0.00000
23	.563	+12.2	+28.59	+5.79	.04797	.010135	.34492
24	.563	+11.2	+24.53	+4.64	.04116	.008118	.34221
25	.563	+11.2	+25.18	+4.47	.04225	.007819	.36961
26	.563	+9.5	+20.17	+3.86	.03385	.006767	.30617
27	.563	+8.5	+18.70	+3.43	.03137	.006014	.30743
28	.563	+8.2	+15.58	+2.77	.02614	.004857	.28947
29	.563	+6.2	+12.21	+2.13	.02049	.003728	.26174
30	.563	+2.5	+3.72	+1.51	.00624	.002644	.06198
31	0.000	+0.0	-.00	+.33	0.00000	0.000000	0.00000
32	0.000	+0.0	-2.27	+1.62	0.00000	0.000000	0.00000
33	0.000	+0.0	-564.70	+259.55	0.00000	0.000000	0.00000
34	0.000	+0.0	-.00	+.33	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 113 DATE :23 MARCH 1983 OAT= 34 BAROMETER= 29.000 WET BULB TEMP= 29 D
RY BULB TEMP= 34
WIND CONDITIONS :GUSTY SSW 0-4 Z/R= 3
SUMMARY:8-76 MAIN ROTOR WITH 20deg SWEEP/60% TAPER AND 20deg ANHEDRAL - TRACTOR
TAIL ROTOR

CONFIGURATION FILE : DATA10 876CIIIWEXT/WTail/New Torque
DATA FILE : TIP113:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 56.04 in. = 4.67 ft.
  CHORD : 3.999996 in. = .258333 ft.
  SOLIDITY = .0704325

TAIL BLADE PROPERTIES :
  RADIUS : 11.499996 in. = .958333 ft.
  CHORD : 2.000004 in. = .166667 ft.
  SOLIDITY : .221433

PROCESSING DATE :2 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000911 +.69512(Ct)^1.5 +261.552(Ct)^3

STANDARD DEVIATION = 1.13901E-15
MEAN ERROR = 2.37500E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+2.16	+144.55	0.00000	0.000000	0.00000
2	0.000	+0.0	+1187.85	+307.12	0.00000	0.000000	0.00000
3	0.000	+0.0	-.38	+1.23	0.00000	0.000000	0.00000
4	0.000	+0.0	-.27	+.09	0.00000	0.000000	0.00000
5	.601	+.1	-4.09	+31.15	-.00000	.001297	.00325
6	.601	+.1	+1.39	+30.68	.00027	.001286	.00065
7	.601	+2.0	+65.62	+36.92	0.00000	0.000000	0.00000
8	.601	+3.1	+99.41	+43.43	.01932	.001808	.27082
9	.600	+4.0	+139.75	+51.32	.02720	.002139	.39359
10	.601	+5.0	+181.87	+62.18	.03535	.002588	.48193
11	.600	+6.0	+232.07	+77.04	.04516	.003210	.56102
12	.600	+7.0	+281.17	+92.96	.05472	.003874	.62007
13	.601	+8.0	+332.95	+113.43	.06471	.004721	.65439
14	.600	+9.0	+386.77	+136.46	.07531	.005687	.68194
15	.600	+10.1	+447.76	+164.92	.08725	.006881	.70282
16	.599	+11.0	+502.42	+197.05	.09814	.008242	.70000
17	.600	+12.0	+552.99	+226.95	.10776	.009471	.70099
18	.600	+11.5	+526.39	+210.35	.10270	.008788	.70283
19	.600	+11.0	+497.54	+193.00	.09689	.008048	.70323
20	.600	+10.5	+470.96	+176.60	.09185	.007375	.70832
21	.601	+10.0	+451.56	+165.87	.08780	.006906	.70693
22	.600	+9.5	+423.59	+150.99	.08243	.006292	.70588
23	.600	+8.5	+371.28	+130.28	.07232	.005434	.67167
24	.601	+7.5	+314.64	+105.93	.06114	.004403	.64427
25	.601	+6.5	+268.08	+88.31	.05205	.003672	.60693
26	.601	+5.5	+214.83	+71.59	.04174	.002978	.53727
27	.601	+4.5	+172.73	+58.53	.03354	.002434	.47359
28	.600	+3.6	+126.95	+48.38	.0247?	.002017	.36152
29	.600	+2.5	+86.28	+40.70	.01679	.001696	.24076
30	0.000	+.1	+.27	+.09	0.00000	0.000000	0.00000
31	0.000	+.1	+2.16	+144.95	0.00000	0.000000	0.00000
32	0.000	+.1	+1188.50	+307.53	0.00000	0.000000	0.00000
33	0.000	+.1	+.27	+.58	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0003087 +1.57831(Ct)^1.5 +38.594(Ct)^3

STANDARD DEVIATION = 7.933106E-14
MEAN ERROR = -1.65417E-14

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-2.27	+1.92	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.67	+259.19	0.00000	0.000000	0.00000
3	0.000	+0.0	+0.00	+0.00	0.00000	0.000000	0.00000
4	0.000	+0.0	+0.00	+0.00	0.00000	0.000000	0.00000
5	.600	+.5	+.42	+1.16	.00062	.001785	.00287
6	.600	+9.2	+6.29	+1.29	.00926	.001986	.14926
7	.600	+4.4	+6.16	+1.23	0.00000	0.000000	0.00000
8	.600	+7.6	+6.03	+1.26	.00886	.001937	.14335
9	.600	+5.8	+6.03	+1.38	.01181	.002120	.20139
10	.600	+7.1	+11.45	+2.37	.01685	.003637	.20006
11	.600	+7.7	+13.86	+2.42	.02039	.003714	.26077
12	.600	+8.1	+16.88	+2.78	.02483	.004273	.30459
13	.600	+9.4	+20.01	+3.55	.02943	.005447	.30648
14	.600	+10.5	+24.19	+4.11	.03558	.006300	.35448
15	.600	+12.1	+30.81	+5.71	.04531	.008764	.36819
16	.600	+13.2	+35.69	+7.05	.05249	.010821	.36982
17	.600	+14.5	+41.02	+8.42	.06032	.012929	.38132
18	.600	+13.6	+38.86	+7.63	.05716	.011714	.38917
19	.600	+13.1	+36.61	+7.01	.05384	.010764	.38615
20	.600	+11.8	+31.21	+5.62	.04590	.008632	.37907
21	.600	+10.9	+26.99	+5.07	.03970	.007777	.33840
22	.600	+10.0	+24.98	+4.02	.03674	.006164	.38019
23	.600	+8.7	+20.15	+3.72	.02964	.005706	.29756
24	.600	+7.7	+18.79	+3.19	.02764	.004891	.31262
25	.600	+6.7	+15.48	+2.43	.02277	.003736	.30610
26	.600	+11.0	+12.48	+1.93	.01836	.002964	.27925
27	.600	+5.6	+8.57	+1.41	.01261	.002159	.21830
28	.600	+3.1	+7.50	+1.52	.01102	.002335	.16495
29	.600	+5.2	+7.35	+1.25	.01081	.001919	.19487
30	0.000	-5.2	+0.00	+0.00	0.00000	0.000000	0.00000
31	0.000	-5.2	-2.58	+2.89	0.00000	0.000000	0.00000
32	0.000	-5.2	-564.51	+259.05	0.00000	0.000000	0.00000
33	0.000	-5.2	+0.00	+0.00	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 114 DATE :29 MARCH 1983 OAT= 82 BAROMETER= 29.905 WET BULB TEMP= 26.5
DRY BULB TEMP= 82
WIND CONDITIONS :GUSTY 0-4 NSW Z/R= 3
SUMMARY:6-76 MAIN ROTOR WITH 20deg SWEEP 60% TAPER AND 20deg ANHEDRAL TRACTOR TAIL ROTOR

CONFIGURATION FILE : DATA10 $76[[[]WEXT/wTail/New Torque
DATA FILE : TIP114:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 56.04 in. = 4.67 ft.
  CHORD : 3.099996 in. = .258333 ft.
  SOLIDITY : .0704325

TAIL BLADE PROPERTIES :
  RADIUS : 11.499996 in. = .958333 ft.
  CHORD : 2.000004 in. = .166667 ft.
  SOLIDITY : .221433

PROCESSING DATE :2 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000915 +.69406(Ct)^1.5 +274.819(Ct)^3

STANDARD DEVIATION = 8.36118E-16
MEAN ERROR = -1.79261E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+2.53	+144.88	0.00000	0.000000	0.00000
2	0.000	+0.0	+1188.88	+307.66	0.00000	0.000000	0.00000
3	0.000	+0.0	+.65	+.67	0.00000	0.000000	0.00000
4	0.000	+0.0	+.00	+.04	0.00000	0.000000	0.00000
5	.651	-.1	+3.48	+36.75	.00058	.001303	.00199
6	.651	-.1	+7.27	+36.81	.00120	.001306	.00601
7	.650	+2.0	+79.65	+44.20	.01321	.001569	.13147
8	.651	+3.0	+115.77	+51.14	.01918	.001814	.27474
9	.651	+3.9	+164.06	+60.19	.02719	.002137	.39389
10	.651	+4.9	+218.87	+75.15	.03626	.002666	.48601
11	.651	+6.0	+278.75	+92.34	.04621	.003278	.56873
12	.651	+6.9	+339.88	+112.35	.05629	.003984	.62898
13	.650	+7.9	+402.83	+138.24	.06681	.004910	.66807
14	.651	+9.0	+472.43	+169.29	.07827	.006006	.68421
15	.651	+9.9	+527.31	+199.53	.08721	.007066	.68394
16	.649	+11.0	+598.37	+242.27	0.00000	0.000000	0.00000
17	.650	+10.4	+568.76	+219.83	.09438	.007805	.69630
18	.650	+10.0	+541.37	+201.97	.08997	.007187	.70462
19	.650	+9.4	+507.83	+186.20	.08426	.006615	.69380
20	.651	+8.9	+484.45	+172.30	.08029	.006114	.69820
21	.651	+8.4	+443.87	+153.69	.07341	.005443	.68580
22	.651	+7.4	+374.15	+126.53	.06188	.004481	.64463
23	.651	+6.4	+319.73	+105.92	.05296	.003756	.60881
24	.651	+5.4	+260.68	+85.84	.04317	.003044	.55295
25	.651	+4.4	+201.10	+70.40	.03326	.002494	.45657
26	.651	+3.4	+145.35	+56.74	.02407	.002012	.34832
27	.650	+2.4	+102.95	+48.12	.01707	.001709	.24498
28	.650	-.0	+11.53	+36.55	.00191	.001298	.01209
29	0.000	-.0	-.00	+.04	0.00000	0.000000	0.00000
30	0.000	-.0	+2.53	+144.88	0.00000	0.000000	0.00000
31	0.000	-.0	+1188.23	+307.66	0.00000	0.000000	0.00000
32	0.000	-.0	-.00	+.67	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0003274 +1.40025(Ct)^1.5 +68.711(Ct)^3

STANDARD DEVIATION = 1.20477E-14
MEAN ERROR = -2.73913E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-2.58	+2.24	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.67	+259.19	0.00000	0.000000	0.00000
3	0.000	+0.0	-.00	+.00	0.00000	0.000000	0.00000
4	0.000	+0.0	-.00	+.00	0.00000	0.000000	0.00000
5	.650	+.8	+.92	+1.09	.00116	.001429	.00918
6	.650	+9.6	+5.90	+1.34	.00740	.001751	.12087
7	.650	+9.1	+7.11	+1.42	.00890	.001856	.15062
8	.650	+9.8	+9.37	+1.74	.01175	.002279	.18594
9	.650	+10.4	+10.66	+2.00	.01336	.002618	.19621
10	.650	+11.4	+15.68	+2.54	.01965	.003315	.27643
11	.650	+11.2	+17.22	+3.15	.02158	.004115	.25536
12	.650	+11.7	+17.49	+2.99	.02191	.003914	.27570
13	.650	+13.5	+24.76	+4.16	.03102	.005436	.33442
14	.650	+14.4	+30.18	+4.85	.03782	.006338	.38608
15	.650	+15.4	+35.07	+6.24	.04395	.008161	.37562
16	.650	+17.2	+42.77	+8.43	0.00000	0.000000	0.00000
17	.650	+16.4	+41.98	+8.00	.05258	.010465	.38247
18	.650	+15.2	+36.49	+6.52	.04573	.008524	.38173
19	.650	+13.9	+31.86	+5.56	.03993	.007264	.36543
20	.650	+13.6	+29.12	+5.23	.03649	.006843	.33890
21	.650	+12.4	+27.16	+4.46	.03404	.005837	.35797
22	.650	+10.9	+21.17	+3.49	.02652	.004559	.31531
23	.650	+10.6	+15.78	+2.58	.01968	.003269	.28095
24	.650	+13.1	+14.96	+2.45	.01875	.003208	.26623
25	.650	+10.1	+11.97	+2.28	.01499	.002982	.20488
26	.650	+11.8	+8.62	+1.77	.01081	.002315	.16143
27	.650	+9.9	+8.94	+1.64	.01116	.002150	.18254
28	.650	+9.3	+6.57	+1.81	.00823	.002364	.10509
29	0.000	+0.0	+.00	+.00	0.00000	0.000000	0.00000
30	0.000	+0.0	-2.58	+1.92	0.00000	0.000000	0.00000
31	0.000	+0.0	-564.42	+259.38	0.00000	0.000000	0.00000
32	0.000	+0.0	+0.00	+0.00	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 115 DATE :23 MARCH '83 OAT= 31 BAROMETER= 29.905 WET BULB TEMP= 27 DR
Y BULB TEMP= 31
WIND CONDITIONS :GUSTY 0-4 WSW Z/R= 1.2
SUMMARY:S-76 MAIN ROTOR WITH 20deg SWEEP/40% TAPER AND 20deg ANHEDRAL TRACTOR
TAIL ROTOR

CONFIGURATION FILE : DATA10 S76[[[]WEKT/WTail New Torque
DATA FILE : TIP115:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 55.04 in. = 4.67 ft.
CHORD : 3.099996 in. = .258333 ft.
SOLIDITY : .0704325

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :2 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000983 +.67526(Ct)^1.5 +211.455(Ct)^3

STANDARD DEVIATION = 8.09244E-16
MEAN ERROR = 1.80952E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+1.75	+144.86	0.00000	0.000000	0.00000
2	0.000	+0.0	+1188.23	+307.99	0.00000	0.000000	0.00000
3	0.000	+0.0	-.00	+.37	0.00000	0.000000	0.00000
4	0.000	+0.0	+.00	+0.00	0.00000	0.000000	0.00000
5	.601	-.0	-2.76	+30.94	-.00052	.001298	.00175
6	.601	+2.0	+69.78	+37.27	.01385	.001552	.19877
7	.598	+3.1	+104.57	+43.84	.02051	.001841	.29931
8	.601	+4.1	+147.04	+52.53	.02859	.002187	.41481
9	.601	+5.1	+197.98	+65.29	.03843	.002714	.52098
10	.601	+6.1	+250.78	+80.28	.04874	.003341	.60437
11	.601	+7.0	+299.22	+96.19	.05817	.004004	.65752
12	.601	+8.1	+357.26	+118.26	.06938	.004918	.69734
13	.601	+9.1	+419.38	+144.38	.08146	.006005	.72657
14	.601	+10.1	+469.31	+168.93	.09127	.007025	.73557
15	.601	+11.1	+528.07	+200.54	0.00000	0.000000	0.00000
16	.600	+11.6	+550.55	+215.81	0.00000	0.000000	0.00000
17	.601	+11.8	+524.64	+198.83	0.00000	0.000000	0.00000
18	.601	+10.7	+509.85	+189.05	.09892	.007854	.74332
19	.601	+10.1	+470.39	+170.39	.09148	.007095	.73177
20	.602	+9.5	+446.43	+155.84	.08651	.006467	.73842
21	.601	+8.5	+387.81	+131.11	.07532	.005452	.71142
22	.601	+7.5	+330.02	+107.09	.06408	.004452	.68367
23	.601	+6.5	+277.67	+88.80	.05393	.003693	.63633
24	.601	+5.5	+228.09	+72.57	.04432	.003020	.57986
25	.601	+4.5	+178.14	+58.78	.03458	.002443	.49396
26	.601	+3.5	+125.51	+47.88	.02439	.001992	.35874
27	.601	+2.5	+87.45	+40.19	.01700	.001673	.24060
28	.600	+.1	+9.84	+31.04	.00192	.001294	.01216
29	0.000	+.1	-.00	+0.00	0.00000	0.000000	0.00000
30	0.000	+.1	+2.53	+144.86	0.00000	0.000000	0.00000
31	0.000	+.1	+1188.23	+307.60	0.00000	0.000000	0.00000
32	0.000	+.1	+.00	+.77	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0002926 +1.00414(Ct)^1.5 -316.948(Ct)^3

STANDARD DEVIATION = 1.23516E-14
MEAN ERROR = 2.76190E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-2.59	+1.88	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.66	+258.59	0.00000	0.000000	0.00000
3	0.000	+0.0	+.01	+.60	0.00000	0.000000	0.00000
4	0.000	+0.0	-.00	+.16	0.00000	0.000000	0.00000
5	.600	+.0	-.05	+.65	-.00007	-.001002	.00019
6	.600	+6.8	+5.91	+1.34	.00869	.002049	.13158
7	.600	+7.8	+8.71	+1.63	.01281	.002505	.19268
8	.600	+8.4	+11.18	+2.30	.01644	.003523	.19917
9	.600	+7.6	+12.33	+2.31	.01813	.003539	.22952
10	.600	+9.1	+12.62	+2.44	.01855	.003749	.22428
11	.600	+10.0	+16.79	+2.98	.02468	.004573	.28219
12	.600	+11.3	+21.47	+3.63	.03157	.005568	.33519
13	.600	+12.1	+26.61	+4.70	.03914	.007208	.35739
14	.600	+13.0	+29.16	+5.23	.04288	.008028	.36804
15	.600	+15.0	+38.38	+7.33	0.00000	0.000000	0.00000
16	.600	+15.6	+41.56	+8.46	0.00000	0.000000	0.00000
17	.600	+14.0	+37.94	+6.97	0.00000	0.000000	0.00000
18	.600	+15.3	+33.13	+6.06	.04871	.009293	.38494
19	.600	+12.4	+31.14	+5.48	.04578	.008366	.38965
20	.600	+10.9	+23.99	+4.09	.03527	.006268	.35168
21	.600	+10.9	+23.37	+4.13	.03437	.006345	.33419
22	.600	+8.9	+18.17	+3.03	.02671	.004653	.31226
23	.600	+8.9	+14.84	+2.74	.02183	.004208	.25497
24	.600	+9.4	+12.07	+2.40	.01774	.003687	.21333
25	.600	+5.3	+9.70	+1.76	.01427	.002702	.20993
26	.600	+5.2	+8.25	+1.47	.01213	.002263	.19638
27	.600	+7.5	+8.67	+1.51	.01275	.002318	.20665
28	.600	+4.1	+4.90	+1.29	.00721	.001974	.10315
29	0.000	+0.0	+.00	+.16	0.00000	0.000000	0.00000
30	0.000	+0.0	-2.59	+1.88	0.00000	0.000000	0.00000
31	0.000	+0.0	-564.65	+258.71	0.00000	0.000000	0.00000
32	0.000	+0.0	-.00	+.20	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 116 DATE :23 MARCH 1983 OAT= 31 BAROMETER= 29.91 WET BULB TEMP= 26 DRY BULB TEMP= 30
WIND CONDITIONS :LIGHT GUSTS 0-3 WSW Z/R= .75
SUMMARY:S-76 MAIN ROTOR WITH 20deg SWEEP-60% TAPER AND 20deg ANHEDRAL / TRACTOR TAIL ROTOR

CONFIGURATION FILE : DATA10 $76[[[]wEXT/uTail/New Torque
DATA FILE : TIP116:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.099996 in. = .258333 ft.
SOLIDITY : .0704329

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :2 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000915 +.62503(Ct)^1.5 +236.218(Ct)^3

STANDARD DEVIATION = 1.55865E-15
MEAN ERROR = 3.25000E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-.76	+144.75	0.00000	0.000000	0.00000
2	0.000	+0.0	+1186.91	+308.16	0.00000	0.000000	0.00000
3	0.000	+0.0	-1.32	+.19	0.00000	0.000000	0.00000
4	0.000	+0.0	-1.32	+.05	0.00000	0.000000	0.00000
5	.601	-.1	+.96	+31.24	.00019	.001300	.00037
6	.602	-.1	+4.63	+31.44	.00090	.001304	.00387
7	.602	+2.0	+73.48	+37.60	.01424	.001560	.20435
8	.601	+2.9	+107.61	+44.09	.02087	.001831	.30981
9	.601	+3.9	+153.92	+53.12	.02990	.002209	.43914
10	.601	+5.0	+210.09	+66.21	.04076	.002751	.56138
11	.601	+6.0	+263.83	+81.89	.05120	.003403	.63888
12	.602	+7.0	+319.42	+99.69	.06190	.004137	.69858
13	.601	+7.9	+374.68	+120.15	.07282	.005000	.73748
14	.601	+9.0	+433.68	+145.17	.08423	.006038	.75980
15	.601	+10.0	+490.29	+172.63	.09519	.007177	.76794
16	.600	+11.0	+541.86	+200.08	.10526	.008337	.76897
17	.601	+10.4	+514.89	+185.81	.10011	.007735	.76837
18	.601	+10.0	+484.69	+170.64	.09428	.007108	.76433
19	.598	+9.4	+454.78	+156.26	.08913	.006558	.76145
20	.601	+8.9	+430.85	+143.87	.08361	.005978	.75885
21	.601	+8.3	+401.01	+130.19	.07790	.005416	.75346
22	.601	+7.4	+344.31	+108.01	.06688	.004487	.72204
23	.601	+6.4	+289.11	+89.98	.05620	.003745	.66755
24	.601	+5.5	+240.24	+74.43	.04668	.003097	.61118
25	.601	+4.4	+183.89	+59.42	.03573	.002473	.51266
26	.601	+3.4	+134.10	+48.90	.02605	.002034	.38790
27	.600	+2.5	+94.30	+40.62	.01836	.001694	.27567
28	.601	-.0	+8.90	+31.83	.00173	.001291	.01046
29	0.000	-.0	+1.32	+.05	0.00000	0.000000	0.00000
30	0.000	-.0	+1.20	+144.73	0.00000	0.000000	0.00000
31	0.000	-.0	+1189.56	+307.41	0.00000	0.000000	0.00000
32	0.000	-.0	+1.32	+.74	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0002632 +1.67704(Ct)^1.5 -28.697(Ct)^3

STANDARD DEVIATION = 1.08905E-13
MEAN ERROR = -2.27083E-14

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-1.81	+2.04	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.63	+259.18	0.00000	0.000000	0.00000
3	0.000	+0.0	+.00	+.02	0.00000	0.000000	0.00000
4	0.000	+0.0	-.00	+.02	0.00000	0.000000	0.00000
5	.600	+.1	+.26	+.92	.00038	.001412	.00172
6	.600	+6.6	+6.14	+1.16	.00902	.001773	.16868
7	.600	+7.2	+8.17	+1.26	.01200	.001930	.22673
8	.600	+7.8	+7.84	+1.19	.01152	.001830	.22489
9	.600	+7.8	+9.73	+1.63	.01430	.002506	.22701
10	.600	+7.8	+10.29	+1.50	.01512	.002303	.26854
11	.600	+9.9	+15.86	+2.54	.02331	.003900	.30365
12	.600	+10.5	+17.58	+2.78	.02583	.004261	.32413
13	.600	+11.4	+22.05	+3.59	.03240	.005500	.35288
14	.600	+12.5	+27.57	+4.64	.04053	.007118	.38134
15	.600	+13.6	+32.44	+6.10	.04767	.009362	.36994
16	.600	+15.3	+40.30	+7.96	.05923	.012211	.39282
17	.600	+14.0	+35.77	+6.93	.05257	.010629	.37736
18	.600	+13.3	+32.70	+6.18	.04806	.009473	.37011
19	.600	+11.9	+28.99	+5.08	.04261	.007795	.37548
20	.600	+10.8	+25.06	+4.59	.03683	.007032	.33452
21	.600	+10.8	+24.80	+4.26	.03645	.006529	.35462
22	.600	+9.2	+18.28	+3.25	.02686	.004990	.29352
23	.600	+7.8	+17.08	+2.95	.02511	.004531	.29228
24	.600	+9.1	+12.04	+2.30	.01770	.003531	.22183
25	.600	+5.8	+10.73	+2.16	.01576	.003310	.19898
26	.600	+4.8	+7.78	+1.24	.01144	.001904	.21379
27	.600	+4.5	+7.62	+1.34	.01121	.002058	.19181
28	.600	+4.4	+4.86	+1.18	.00714	.001804	.11138
29	0.000	+0.0	+.00	+.02	0.00000	0.000000	0.00000
30	0.000	+0.0	-2.58	+2.05	0.00000	0.000000	0.00000
31	0.000	+0.0	-564.66	+258.68	0.00000	0.000000	0.00000
32	0.000	+0.0	+.00	+.02	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 117 DATE :24 MARCH 1983 OAT= 36 BAROMETER= 30.02 WET BULB TEMP= 30 DRY BULB TEMP= 36
WIND CONDITIONS :LIGHT SSW 0-2 Z/R= 3
SUMMARY:H-34 CALIBRATION RUN

CONFIGURATION FILE : DATA12 H34[III.WTail.New-Torque
DATA FILE : TIP117:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 54.24996 in. = 4.52083 ft.
CHORD : 4.250004 in. = .354167 ft.
SOLIDITY : .099747

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :2 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001152 +.80585(Ct)^1.5 +155.570(Ct)^3

STANDARD DEVIATION = 2.29129E-15
MEAN ERROR = -5.00000E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+3.42	+144.52	0.00000	0.000000	0.00000
2	0.000	+0.0	+1189.09	+307.36	0.00000	0.000000	0.00000
3	0.000	+0.0	+.86	+.99	0.00000	0.000000	0.00000
4	0.000	+0.0	+1.40	+.12	0.00000	0.000000	0.00000
5	0.000	+0.0	+1.13	+.12	0.00000	0.000000	0.00000
6	.600	-.2	+3.99	+35.71	.00058	.001153	.00272
7	.601	+2.1	+66.18	+43.09	.00965	.001390	.15235
8	.600	+4.0	+159.74	+65.76	.02336	.002127	.37478
9	.601	+5.9	+278.92	+104.94	.04070	.003387	.54139
10	.600	+8.0	+406.98	+160.77	.05949	.005198	.62336
11	.600	+10.0	+540.74	+234.93	.07897	.007589	.65303
12	.599	+10.0	+536.86	+234.68	.07865	.007606	.64776
13	.599	+10.3	+557.18	+245.42	.08165	.007955	.65493
14	.600	+10.5	+579.45	+257.71	.08459	.008322	.66025
15	.601	+9.6	+522.89	+222.83	.07627	.007189	.65428
16	.601	+9.3	+500.15	+209.69	.07290	.006761	.65017
17	.600	+9.4	+506.63	+213.28	.07409	.006899	.65277
18	.600	+9.0	+482.77	+198.43	.07061	.006420	.65273
19	.600	+8.5	+453.98	+183.11	.06638	.005922	.64491
20	.600	+7.5	+387.65	+148.90	.05660	.004809	.62537
21	.601	+6.4	+310.23	+116.55	.04524	.003760	.57160
22	.601	+6.4	+311.74	+116.88	.04544	.003769	.57405
23	.600	+5.4	+252.28	+94.08	.03689	.003043	.51999
24	.601	+4.5	+192.56	+74.64	.02807	.002407	.43639
25	.600	+3.5	+136.48	+57.80	.01998	.001871	.33694
26	.600	+2.5	+93.71	+47.83	.01370	.001547	.23153
27	.600	-.1	+5.83	+35.38	.00085	.001143	.00485
28	0.000	-.1	-1.13	+.12	0.00000	0.000000	0.00000
29	0.000	-.1	+3.41	+145.01	0.00000	0.000000	0.00000
30	0.000	-.1	+1188.41	+307.64	0.00000	0.000000	0.00000
31	0.000	-.1	-1.13	+.51	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 118 DATE :24 MARCH 1983 OAT= 41 BAROMETER= 29.97 WET BULB TEMP= 36 DP
Y BULB TEMP= 41
WIND CONDITIONS :LIGHT FROM NNW 0-3 [illegible]R= 3
SUMMARY:S-78 WITH 20/35 deg DOUBLE SWEEP / NO TAIL ROTOR / REPEAT OF TIP025

CONFIGURATION FILE : DATA9 S78CIIIWEXT/wTail/New Torque
DATA FILE : TIP118:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.22396 in. = 4.68533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0815251

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :2 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001007 +.68018(Ct)^1.5 +289.812(Ct)^3

STANDARD DEVIATION = 1.63145E-15
MEAN ERROR = 3.47926E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+4.90	+144.46	0.00000	0.000000	0.00000
2	0.000	+0.0	+1188.54	+307.08	0.00000	0.000000	0.00000
3	0.000	+0.0	+.31	+1.27	0.00000	0.000000	0.00000
4	0.000	+0.0	+.32	+.89	0.00000	0.000000	0.00000
5	.601	+1.2	-3.47	+35.31	-.00058	.001256	.00223
6	.601	+3.1	+58.43	+39.75	0.00000	0.000000	0.00000
7	.601	+4.0	+138.43	+54.72	.02307	.001946	.36046
8	.601	+5.0	+184.59	+66.76	.03073	.002372	.45849
9	.600	+6.1	+251.51	+84.95	.04195	.003024	.57360
10	.600	+7.0	+298.10	+102.55	.04974	.003652	.61326
11	.600	+8.0	+360.21	+127.78	.06005	.004547	.65350
12	.600	+9.0	+424.67	+158.85	.07082	.005625	.67639
13	.600	+10.1	+494.22	+195.88	.08236	.006984	.68576
14	.599	+11.0	+555.09	+231.51	.09287	.008267	.69120
15	.601	+11.2	+565.71	+237.98	.09417	.008452	.69030
16	.600	+11.1	+563.28	+235.63	.09406	.008399	.69345
17	.600	+10.5	+523.46	+213.28	.08732	.007591	.68632
18	.600	+10.0	+496.54	+194.47	.08292	.006931	.69551
19	.600	+9.5	+463.04	+175.81	.07726	.006261	.69249
20	.600	+8.5	+400.56	+144.06	.06684	.005130	.68002
21	.600	+7.5	+337.33	+116.68	.05628	.004155	.64877
22	.601	+6.5	+280.89	+94.32	.04679	.003354	.60941
23	.601	+5.5	+217.42	+74.10	.03623	.002635	.52827
24	.600	+4.5	+161.16	+59.58	.02689	.002122	.41959
25	.601	+3.5	+119.04	+50.56	.01984	.001799	.31372
26	.601	+2.5	+73.98	+42.02	.01233	.001495	.18489
27	.601	+1.5	+46.72	+38.13	.00777	.001354	.10220
28	.600	-.0	-5.12	+35.15	-.00085	.001251	.00403
29	0.000	-.0	-.32	+.89	0.00000	0.000000	0.00000
30	0.000	-.0	+4.90	+144.89	0.00000	0.000000	0.00000
31	0.000	-.0	+1186.60	+307.89	0.00000	0.000000	0.00000
32	0.000	-.0	-.32	+.54	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 119   DATE :24 MARCH 1983   OAT= 41 BAROMETER= 29.950 WET BULB TEMP= 33 D
RY BULB TEMP= 41
WIND CONDITIONS :LIGHT FROM NNW 0-3   Z/R= 3
SUMMARY:S-70 WITH 20/35 deg DOUBLE SWEEP / TRACTOR TAIL ROTOR

CONFIGURATION FILE : DATA9   S70[II]wSX/wTail/New Torque
DATA FILE : TIP119:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.22396 in. = 4.68533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0815251

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :2 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

***********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001014 +.70855(Ct)^1.5 +209.162(Ct)^3

STANDARD DEVIATION = 3.72322E-15
MEAN ERROR = 7.60000E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+4.91	+144.79	0.00000	0.000000	0.00000
2	0.000	+0.0	+1187.92	+307.77	0.00000	0.000000	0.00000
3	0.000	+0.0	-.32	+.58	0.00000	0.000000	0.00000
4	0.000	+0.0	+.33	+.38	0.00000	0.000000	0.00000
5	.550	-.0	-4.58	+29.63	-.00091	.001254	.00441
6	.551	+.0	+7.70	+30.08	.00153	.001273	.00947
7	.550	+2.1	+55.42	+34.64	.01100	.001468	.15876
8	.550	+3.1	+84.46	+39.41	.01675	.001668	.26238
9	.551	+4.1	+116.22	+46.77	.02305	.001980	.35680
10	.551	+5.2	+162.86	+58.35	.03229	.002469	.47448
11	.550	+6.0	+201.38	+70.09	.03995	.002967	.54325
12	.550	+7.0	+253.12	+87.67	.05026	.003715	.61231
13	.550	+8.0	+304.56	+107.17	.06046	.004541	.66100
14	.550	+9.0	+356.27	+130.61	.07075	.005536	.68630
15	.551	+10.0	+412.87	+159.99	.08184	.006769	.69835
16	.550	+11.2	+471.61	+195.40	.09365	.008282	.69870
17	.550	+12.0	+525.85	+227.96	.10454	.009672	.70852
18	0.000	+0.0	-.33	+.38	0.00000	0.000000	0.00000
19	.550	+9.1	+359.80	+130.63	.07150	.005541	.69669
20	.549	+10.1	+413.52	+159.81	.08244	.006800	.70277
21	.551	+11.0	+463.05	+189.90	.09174	.008030	.69864
22	.550	+12.1	+529.69	+229.18	.10523	.009718	.70925
23	.550	+11.5	+492.67	+204.85	.09803	.008699	.71230
24	.550	+10.5	+438.79	+173.13	.08728	.007350	.70830
25	.550	+9.5	+385.40	+145.40	.07645	.006156	.69331
26	.551	+8.5	+326.00	+117.96	.06466	.004994	.66476
27	.551	+7.5	+280.99	+97.22	.05570	.004113	.64530
28	.550	+6.5	+229.25	+78.93	.04548	.003342	.58592
29	.551	+6.5	+229.75	+77.77	.04555	.003291	.59641
30	.552	+.0	-1.62	+29.74	-.00032	.001254	.00092
31	0.000	+.0	-.01	+.17	0.00000	0.000000	0.00000
32	0.000	+.0	+5.25	+144.95	0.00000	0.000000	0.00000
33	0.000	+.0	+1188.23	+307.98	0.00000	0.000000	0.00000
34	0.000	+.0	-.01	+.44	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0003624 +1.49981(Ct)^1.5 +110.757(Ct)^3

STANDARD DEVIATION = 1.54000E-14
MEAN ERROR = -3.16000E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-3.06	+1.97	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.67	+259.30	0.00000	0.000000	0.00000
3	0.000	+0.0	-.00	+.11	0.00000	0.000000	0.00000
4	0.000	+0.0	+0.00	+0.00	0.00000	0.000000	0.00000
5	.550	+.1	-.16	+.91	-.00029	.001670	.00096
6	.550	+5.6	+5.17	+1.25	.00903	.002285	.12504
7	.550	+5.6	+6.33	+1.34	.01106	.002446	.15830
8	.550	+5.9	+6.89	+1.39	.01205	.002541	.17319
9	.550	+6.6	+7.71	+1.34	.01349	.002451	.21262
10	.550	+7.4	+9.45	+1.85	.01653	.003383	.20896
11	.550	+8.0	+10.58	+2.13	.01849	.003879	.21575
12	.550	+9.3	+13.57	+2.57	.02373	.004681	.25991
13	.550	+10.6	+18.74	+3.49	.03276	.006362	.31018
14	.550	+11.7	+23.16	+4.03	.04051	.007360	.36862
15	.550	+13.1	+27.78	+5.66	.04858	.010323	.34514
16	.550	+15.4	+37.53	+8.01	.06562	.014615	.38274
17	.550	+16.3	+40.46	+9.19	.07076	.016764	.37361
18	0.000	+0.0	+0.00	+0.00	0.00000	0.000000	0.00000
19	.550	+14.2	+23.69	+4.49	.04140	.008187	.34231
20	.550	+15.3	+28.56	+5.77	.04990	.010520	.35252
21	.550	+17.0	+35.44	+7.87	.06192	.014341	.35754
22	.550	+18.5	+40.55	+9.34	.07085	.017036	.36836
23	.550	+17.1	+35.90	+7.65	.06273	.013942	.37495
24	.550	+15.4	+29.57	+5.65	.05167	.010303	.37933
25	.550	+14.4	+26.81	+4.88	.04684	.008905	.37876
26	.550	+12.4	+20.53	+3.57	.03587	.006518	.34679
27	.550	+11.4	+16.13	+2.65	.02819	.004836	.32563
28	.550	+10.2	+13.11	+2.40	.02290	.004381	.26317
29	.550	+10.2	+12.57	+1.72	.02197	.003133	.34579
30	.550	+3.1	+4.99	+1.22	.00873	.002231	.12156
31	0.000	+0.0	-.07	+.00	0.00000	0.000000	0.00000
32	0.000	+0.0	-2.98	+2.09	0.00000	0.000000	0.00000
33	0.000	+0.0	-565.31	+259.36	0.00000	0.000000	0.00000
34	0.000	+0.0	-.37	+.02	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 120 DATE :24 MARCH 1983 OAT= 40 BAROMETER= 29.931 WET BULB TEMP= 32 D
RY BULB TEMP= 39.5
WIND CONDITIONS :ZERO Z/R= 3
SUMMARY:S-76 WITH 20/35 deg DOUBLE SWEEP / TRACTOR TAIL ROTOR

CONFIGURATION FILE : DATA9 S76[I]WEXT/WTail New Torque
DATA FILE : TIP120:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 56.22396 in. = 4.68533 ft.
  CHORD : 3.6 in. = .3 ft.
  SOLIDITY : .0819251

TAIL BLADE PROPERTIES :
  RADIUS : 11.499996 in. = .958333 ft.
  CHORD : 2.000004 in. = .166667 ft.
  SOLIDITY : .221433

PROCESSING DATE :2 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001023 +.69172(Ct)^1.5 +258.929(Ct)^3

STANDARD DEVIATION = 2.91618E-15
MEAN ERROR = -6.36364E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+5.27	+144.62	0.00000	0.000000	0.00000
2	0.000	+0.0	+1188.24	+307.32	0.00000	0.000000	0.00000
3	0.000	+0.0	+.00	+1.03	0.00000	0.000000	0.00000
4	0.000	+0.0	-.00	+.16	0.00000	0.000000	0.00000
5	0.000	+0.0	-.01	+0.00	0.00000	0.000000	0.00000
6	.601	+.0	-6.60	+35.86	-.00110	.001276	.00577
7	.601	+.0	-7.06	+35.45	-.00118	.001262	.00647
8	.600	+2.0	+55.80	+39.37	.00931	.001402	.12940
9	.601	+3.0	+84.29	+45.04	.01405	.001602	.20980
10	.601	+4.1	+129.48	+54.38	.02158	.001933	.33108
11	.601	+5.0	+179.89	+66.15	.02981	.002350	.44221
12	.601	+6.0	+234.81	+81.27	.03915	.002892	.54077
13	.601	+7.0	+298.73	+100.71	.04947	.003583	.60121
14	.601	+8.0	+357.79	+126.27	.05963	.004492	.65454
15	.601	+9.0	+421.22	+155.65	.07022	.005538	.67937
16	.600	+10.0	+483.74	+188.75	.08075	.006725	.68893
17	.599	+11.1	+548.51	+229.88	0.00000	0.000000	0.00000
18	.601	+10.7	+532.33	+217.11	.08878	.007728	.69108
19	.600	+10.4	+517.17	+205.37	.08638	.007321	.70013
20	.601	+9.4	+445.99	+167.63	.07440	.005968	.68651
21	.601	+8.5	+394.37	+140.81	.06571	.005008	.67919
22	.601	+7.4	+322.06	+111.88	.05368	.003980	.63093
23	.601	+6.4	+262.13	+89.84	.04369	.003195	.57682
24	.601	+5.4	+205.52	+72.17	.03425	.002567	.49859
25	.601	+4.4	+154.37	+58.63	.02573	.002085	.39952
26	.600	+3.6	+110.02	+49.95	.01836	.001779	.29228
27	.601	+2.5	+73.62	+41.00	.01227	.001487	.18458
28	.601	-.0	-0.00	+35.13	-.00134	.001248	.00798
29	0.000	-.0	+.01	+0.00	0.00000	0.000000	0.00000
30	0.000	-.0	+5.27	+144.76	0.00000	0.000000	0.00000
31	0.000	-.0	+1188.24	+307.72	0.00000	0.000000	0.00000
32	0.000	-.0	+.00	+.63	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0003144 +1.54035(Ct)^1.5 +96.980(Ct)^3

STANDARD DEVIATION = 4.14515E-14
MEAN ERROR = -9.04545E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-2.39	+2.03	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.64	+259.19	0.00000	0.000000	0.00000
3	0.000	+0.0	+.03	+.00	0.00000	0.000000	0.00000
4	0.000	+0.0	-.18	+.00	0.00000	0.000000	0.00000
5	0.000	+0.0	-.03	+.00	0.00000	0.000000	0.00000
6	.600	+.5	-.13	+.98	-.00020	.001511	.00061
7	.600	+1.0	+6.89	+1.36	.01014	.002090	.16251
8	.600	+1.0	+7.21	+1.19	.01060	.001828	.19854
9	.600	+1.6	+8.28	+1.42	.01218	.002177	.20531
10	.600	+2.6	+10.59	+2.23	.01557	.003423	.18886
11	.600	+2.4	+12.57	+2.38	.01849	.003647	.22930
12	.600	+4.4	+16.57	+3.11	.02437	.004773	.26521
13	.600	+5.3	+19.65	+3.44	.02890	.005271	.31018
14	.600	+5.7	+22.39	+3.69	.03293	.005666	.35086
15	.600	+7.1	+29.18	+5.33	.04145	.008185	.34300
16	.600	+8.6	+34.62	+6.75	.05092	.010360	.36907
17	.600	+10.0	+41.63	+8.65	0.00000	0.000000	0.00000
18	.600	+10.0	+39.90	+8.34	.05868	.012796	.36963
19	.600	+9.3	+37.53	+7.61	.05519	.011683	.36926
20	.600	+7.5	+30.31	+5.56	.04457	.008526	.36725
21	.600	+6.0	+28.16	+4.69	.04141	.007190	.38996
22	.600	+3.8	+20.28	+3.45	.02983	.005295	.32368
23	.600	+3.0	+13.54	+2.31	.01992	.003540	.26423
24	.600	+3.0	+13.41	+2.35	.01972	.003606	.25544
25	.600	+.4	+9.76	+1.46	.01435	.002242	.25516
26	.600	+.4	+9.91	+1.77	.01458	.002713	.21592
27	.600	+1.1	+8.30	+1.31	.01221	.002007	.22363
28	.600	+1.1	+7.98	+1.53	.01027	.002351	.14723
29	0.000	+1.1	+.03	+.00	0.00000	0.000000	0.00000
30	0.000	+1.1	-2.54	+2.04	0.00000	0.000000	0.00000
31	0.000	+1.1	-563.96	+259.20	0.00000	0.000000	0.00000
32	0.000	+1.1	+.03	+.04	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 121   DATE :24 MARCH 1983 OAT= 40 BAROMETER= 29.93 WET BULB TEMP= 32 DRY BULB TEMP= 39.5
WIND CONDITIONS :LIGHT W 0-3   Z/R= 3
SUMMARY:S-70 WITH 20/35 deg DOUBLE SWEEP / TRACTOR TAIL ROTOR

CONFIGURATION FILE : DATA9   S70[I]WEXT/wTail/New Torque
DATA FILE : TIP121:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
    RADIUS : 56.22396 in. = 4.68533 ft.
    CHORD : 3.6 in. = .3 ft.
    SOLIDITY : .0815251

TAIL BLADE PROPERTIES :
    RADIUS : 11.499996 in. = .958333 ft.
    CHORD : 2.000004 in. = .166667 ft.
    SOLIDITY : .221433

PROCESSING DATE :2 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001039 +.68176(Ct)^1.5 +288.836(Ct)^3

STANDARD DEVIATION = 1.56308E-15
MEAN ERROR = 3.68421E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+5.27	+144.58	0.00000	0.000000	0.00000
2	0.000	+0.0	+1186.23	+307.48	0.00000	0.000000	0.00000
3	0.000	+0.0	+.00	+.87	0.00000	0.000000	0.00000
4	0.000	+0.0	-.00	+.08	0.00000	0.000000	0.00000
5	.651	+.3	-5.70	+41.90	-.00081	.001269	.00366
6	.651	+2.0	+62.03	+46.08	.00880	.001395	.11945
7	.652	+3.0	+96.31	+52.55	.01362	.001586	.20232
8	.652	+3.9	+138.36	+61.27	.01958	.001851	.29893
9	.652	+5.2	+210.03	+78.39	.02973	.002368	.43700
10	.652	+6.0	+263.90	+93.29	.03737	.002820	.51728
11	.652	+7.0	+335.20	+116.27	.04741	.003510	.59380
12	.651	+8.0	+411.85	+144.97	.05843	.004389	.64962
13	.652	+9.0	+485.58	+179.47	.06874	.005423	.67108
14	.651	+10.1	+582.69	+230.31	.08261	.006969	.68787
15	.652	+10.4	+603.53	+243.70	.08546	.007365	.68487
16	.652	+9.5	+528.43	+199.34	.07466	.006011	.68519
17	.651	+8.5	+451.18	+163.00	.06396	.004932	.66221
18	.652	+7.5	+379.44	+131.01	.05369	.003957	.63481
19	.652	+6.4	+299.67	+102.58	.04243	.003100	.56923
20	.652	+5.5	+239.17	+84.43	.03385	.002550	.49299
21	.652	+4.5	+168.97	+67.09	.02391	.002026	.36836
22	.651	+3.5	+123.46	+56.89	.01751	.001723	.27168
23	.652	-.0	-11.62	+42.85	-.00165	.001295	.01041
24	0.000	-.0	+.00	+.08	0.00000	0.000000	0.00000
25	0.000	-.0	+5.27	+144.48	0.00000	0.000000	0.00000
26	0.000	-.0	+1190.18	+307.44	0.00000	0.000000	0.00000
27	0.000	-.0	+.00	+.87	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0003561 +1.34978(Ct)^1.5 +187.357(Ct)^3

STANDARD DEVIATION = 2.479606E-14
MEAN ERROR = -5.84211E-15

Pt	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-2.58	+2.07	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.67	+259.19	0.00000	0.000000	0.00000
3	0.000	+0.0	+0.00	+0.00	0.00000	0.000000	0.00000
4	0.000	+0.0	+0.00	+0.00	0.00000	0.000000	0.00000
5	.651	+1.4	+1.81	+1.09	.00227	.001427	.02516
6	.651	+3.1	+9.41	+1.44	.01177	.001881	.22580
7	.651	+3.1	+9.65	+1.73	.01207	.002256	.19550
8	.651	+5.6	+9.42	+2.21	.01177	.002883	.14744
9	.651	+7.2	+14.05	+2.49	.01756	.003250	.23830
10	.651	+7.8	+16.96	+3.17	.02120	.004130	.24879
11	.651	+8.7	+19.05	+3.41	.02382	.004454	.27468
12	.651	+9.4	+23.55	+3.74	.02944	.004884	.34416
13	.651	+10.9	+29.74	+4.94	.03718	.006441	.37028
14	.651	+12.3	+38.61	+7.48	.04826	.009763	.36136
15	.651	+13.1	+41.43	+7.89	.05180	.010294	.38102
16	.651	+12.2	+38.60	+7.11	.04825	.009278	.38044
17	.651	+9.9	+28.15	+4.57	.03520	.005960	.36862
18	.651	+8.2	+22.97	+3.51	.02872	.004594	.35332
19	.651	+6.5	+16.12	+2.66	.02015	.003473	.27409
20	.651	+7.0	+14.10	+2.80	.01763	.003650	.21344
21	.651	+6.1	+13.91	+2.31	.01739	.003015	.25315
22	.651	+5.6	+9.86	+1.68	.01236	.002091	.21963
23	.651	+4.6	+7.57	+1.96	.00947	.002562	.11961
24	0.000	+0.0	+0.00	+0.00	0.00000	0.000000	0.00000
25	0.000	+0.0	-2.42	+2.07	0.00000	0.000000	0.00000
26	0.000	+0.0	-564.67	+259.05	0.00000	0.000000	0.00000
27	0.000	+0.0	+0.00	+0.00	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 122 DATE :24 MARCH 1983 OAT= 38 BAROMETER= 29.949 WET BULB TEMP= 30.5
DRY BULB TEMP= 38
WIND CONDITIONS :LIGHT W 0-3 Z/R= 1.2
SUMMARY:S-79 WITH 20/35 deg DOUBLE SWEEP / TRACTOR TAIL ROTOR

CONFIGURATION FILE : DATA9 $70[1:]WEKT/wTail/New Torque
DATA FILE : TIP122:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 56.22396 in. = 4.68533 ft.
  CHORD : 3.6 in. = .3 ft.
  SOLIDITY : .0815251

TAIL BLADE PROPERTIES :
  RADIUS : 11.499996 in. = .958333 ft.
  CHORD : 2.000004 in. = .166667 ft.
  SOLIDITY : .221433

PROCESSING DATE :2 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001011 +.67242(Ct)^1.5 +223.856(Ct)^3

STANDARD DEVIATION = 8.51835E-16
MEAN ERROR = 1.90476E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+5.26	+144.52	0.00000	0.000000	0.00000
2	0.000	+0.0	+1188.22	+307.96	0.00000	0.000000	0.00000
3	0.000	+0.0	-.01	+.40	0.00000	0.000000	0.00000
4	0.000	+0.0	-.01	+.15	0.00000	0.000000	0.00000
5	.602	+.3	+8.97	+35.56	.00149	.001261	.00922
6	.602	+.3	+14.47	+35.06	.00240	.001271	.01871
7	.601	+2.1	+62.02	+40.02	.01031	.001420	.14888
8	.601	+3.0	+89.50	+44.82	.01490	.001593	.2305[illegible]
9	.601	+4.0	+126.51	+53.05	.02137	.001883	.3349[illegible]
10	.600	+5.0	+181.21	+64.81	.03021	.002306	.45967
11	.601	+6.0	+243.76	+82.89	.04053	.002913	.56548
12	.600	+7.0	+304.88	+102.02	.05089	.003634	.63767
13	.601	+8.0	+366.10	+125.95	.06101	.004480	.67917
14	.600	+9.0	+427.91	+154.18	.07151	.005499	.70208
15	.600	+10.0	+505.13	+190.92	.08447	.006814	.72739
16	.600	+10.5	+534.93	+209.11	.08937	.007456	.72345
17	.599	+10.5	+534.47	+207.67	.08942	.007415	.72803
18	.600	+9.5	+460.89	+172.47	.07817	.006137	.71905
19	.601	+8.6	+408.48	+144.54	.06800	.005135	.69710
20	.601	+7.5	+341.48	+114.88	.05687	.004093	.67054
21	.600	+6.5	+277.13	+92.07	.04630	.003283	.61269
22	.600	+5.6	+219.74	+73.90	.03663	.002629	.53832
23	.600	+4.5	+161.53	+59.40	.02693	.002114	.42215
24	.600	+3.5	+112.79	+49.24	.01882	.001753	.29721
25	.600	-.0	-5.34	+34.74	-.00089	.001238	.00434
26	0.000	-.0	+.01	+.15	0.00000	0.000000	0.00000
27	0.000	-.0	+5.26	+144.54	0.00000	0.000000	0.00000
28	0.000	-.0	+1190.86	+307.61	0.00000	0.000000	0.00000
29	0.000	-.0	+.01	+.62	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0004027 +1.51961(Ct)^1.5 +92.353(Ct)^3

STANDARD DEVIATION = 8.43317E-14
MEAN ERROR = -1.88571E-14

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-1.81	+1.67	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.24	+259.79	0.00000	0.000000	0.00000
3	0.000	+0.0	+.43	+.68	0.00000	0.000000	0.00000
4	0.000	+0.0	-.01	+.55	0.00000	0.000000	0.00000
5	.601	+2.9	+2.61	+1.18	.00382	.001798	.64371
6	.601	+5.5	+6.68	+1.74	.00979	.002657	.12083
7	.601	+6.3	+9.35	+1.92	.01370	.002939	.18149
8	.601	+6.3	+9.51	+1.89	.01394	.002893	.18940
9	.601	+6.3	+8.89	+1.98	.01303	.003021	.16374
10	.601	+7.1	+10.92	+2.54	.01601	.003891	.17319
11	.601	+8.4	+16.07	+3.00	.02355	.004582	.26250
12	.601	+8.4	+16.43	+3.00	.02407	.004592	.27064
13	.601	+9.6	+21.47	+3.93	.03147	.006005	.30938
14	.601	+10.4	+25.43	+4.63	.03727	.007076	.33834
15	.601	+12.2	+30.83	+5.73	.04519	.008755	.36506
16	.601	+13.2	+36.02	+7.34	.05279	.011231	.35938
17	.601	+13.2	+36.35	+7.46	.05327	.011410	.35861
18	.601	+12.1	+32.71	+6.19	.04794	.009461	.36912
19	.601	+9.7	+24.46	+4.58	.03585	.007001	.32261
20	.601	+7.9	+18.30	+3.60	.02681	.005502	.26553
21	.601	+7.9	+18.11	+3.21	.02654	.004906	.29327
22	.601	+6.8	+15.64	+2.61	.02292	.003987	.28959
23	.601	+4.4	+10.82	+1.75	.01586	.002674	.24851
24	.601	+3.5	+7.66	+1.68	.01123	.002570	.15401
25	.601	+2.7	+5.61	+1.58	.00822	.002421	.10234
26	0.000	-.2	+.01	+.55	0.00000	0.000000	0.00000
27	0.000	-.2	-2.13	+1.52	0.00000	0.000000	0.00000
28	0.000	-.2	-564.51	+259.48	0.00000	0.000000	0.00000
29	0.000	-.2	+.01	+.52	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 123 DATE :24 MARCH 1983 10:50 OAT= 36 BAROMETER= 29.961 WET BULB TEMP = 29 DRY BULB TEMP= 36
WIND CONDITIONS :LIGHT W @-3 R/R= .75
SUMMARY:0-70 WITH 20/35 deg DOUBLE SWEEP / TRACTOR TAIL ROTOR

CONFIGURATION FILE : DATA9 $TOC[[]WEKT/wTail/New Torque
DATA FILE : TIP[33:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 56.22396 in. = 4.68533 ft.
  CHORD : 3.6 in. = .3 ft.
  SOLIDITY : .0015251

TAIL BLADE PROPERTIES :
  RADIUS : 11.499996 in. = .958333 ft.
  CHORD : 2.000004 in. = .166667 ft.
  SOLIDITY : .221433

PROCESSING DATE :2 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001015 +.62468(Ct)^1.5 +266.561(Ct)^3

STANDARD DEVIATION = 2.67956E-15
MEAN ERROR = -6.31579E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+5.24	+144.43	0.00000	0.000000	0.00000
2	0.000	+0.0	+1188.24	+307.74	0.00000	0.000000	0.00000
3	0.000	+0.0	+.00	+.61	0.00000	0.000000	0.00000
4	0.000	+0.0	+0.00	+0.00	0.00000	0.000000	0.00000
5	.601	+.0	-7.10	+35.82	-.00118	.001272	.00645
6	.601	+2.0	+60.54	+39.23	.01008	.001395	.14658
7	.601	+3.2	+101.97	+46.47	.01695	.001649	.27023
8	.601	+4.0	+136.01	+53.00	.02261	.001880	.36497
9	.600	+5.2	+200.87	+68.10	.03348	.002422	.51856
10	.601	+6.1	+251.71	+83.25	.04183	.002953	.58495
11	.600	+7.2	+323.78	+106.60	.05400	.003795	.66772
12	.601	+8.0	+382.75	+127.57	.06377	.004537	.71672
13	.601	+9.0	+448.60	+158.59	.07472	.005638	.73142
14	.600	+10.1	+522.84	+196.20	.08719	.006983	.74438
15	.600	+10.5	+544.68	+211.02	.09085	.007512	.73593
16	.600	+10.9	+548.50	+210.82	.09163	.007517	.74501
17	.601	+9.5	+468.24	+174.96	.07992	.006212	.73429
18	.601	+8.5	+416.81	+142.40	.06932	.005054	.72897
19	.602	+7.5	+351.08	+115.54	.05838	.004095	.69401
20	.601	+6.5	+288.11	+90.65	.04666	.003223	.63137
21	.600	+5.5	+221.77	+72.25	.03700	.002573	.55045
22	.601	+4.5	+165.10	+58.48	.02746	.002076	.44257
23	.601	+3.5	+115.85	+48.66	.01926	.001726	.31250
24	0.000	+0.0	+0.00	+0.00	0.00000	0.000000	0.00000
25	0.000	+0.0	+5.24	+144.43	0.00000	0.000000	0.00000
26	0.000	+0.0	+1188.24	+307.74	0.00000	0.000000	0.00000
27	0.000	+0.0	+.00	+.61	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0009959 +1.27305(Ct)^1.5 +243.920(Ct)^3

STANDARD DEVIATION = 9.60177E-15
MEAN ERROR = -2.26316E-15

Pt.	Tip Mach	THeta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-1.82	+.98	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.68	+260.24	0.00000	0.000000	0.00000
3	0.000	+0.0	-.01	+1.04	0.00000	0.000000	0.00000
4	0.000	+0.0	+0.00	+0.00	0.00000	0.000000	0.00000
5	.600	+4.8	+6.50	+2.17	.00955	.003321	.09349
6	.600	+5.6	+9.59	+2.14	.01409	.003286	.16934
7	.600	+4.8	+9.78	+2.28	.01437	.003499	.16384
8	.600	+7.7	+8.47	+2.30	.01244	.003533	.13073
9	.600	+6.8	+12.08	+2.92	.01775	.004475	.17584
10	.600	+7.8	+16.25	+3.48	.02387	.005334	.23003
11	.600	+8.5	+19.11	+3.82	.02807	.005853	.26736
12	.600	+9.2	+21.64	+3.78	.03179	.005797	.32590
13	.600	+10.5	+25.84	+4.99	.03796	.007655	.32149
14	.600	+12.4	+33.74	+6.89	.04956	.010555	.34782
15	.600	+13.3	+40.62	+8.94	.05966	.013706	.35381
16	.600	+13.3	+39.75	+9.00	.05838	.013798	.34017
17	.600	+11.6	+33.69	+7.19	.04949	.011026	.33224
18	.600	+9.3	+25.04	+4.90	.03678	.007503	.31287
19	.600	+8.0	+21.04	+4.24	.03091	.006504	.27802
20	.600	+8.2	+15.55	+3.51	.02285	.005384	.21343
21	.600	+5.2	+13.21	+2.82	.01940	.004324	.20788
22	.600	+5.7	+11.50	+2.61	.01689	.004007	.18220
23	.600	+2.6	+7.43	+2.29	.01092	.003509	.10817
24	0.000	+0.0	+0.00	+0.00	0.00000	0.000000	0.00000
25	0.000	+0.0	-1.82	+.98	0.00000	0.000000	0.00000
26	0.000	+0.0	-564.68	+260.24	0.00000	0.000000	0.00000
27	0.000	+0.0	-.01	+1.04	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 124 DATE :20 MARCH 1983 8:46 OAT= 52 BAROMETER= 29.62 WET BULB TEMP= 50.5 DRY BULB TEMP= 52
WIND CONDITIONS :ZERO Z/R= 0
SUMMARY:S-70 W/ 20 Deg 35 Deg DOUBLE SWEEP/ PUSHER TAIL ROTOR

CONFIGURATION FILE : DATA9 S70(III)WEXT/WTail/New Torque
DATA FILE : TIP124:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.22396 in. = 4.68533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0815251

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :2 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0081811 +.73985(Ct)^1.5 +157.426(Ct)^3

STANDARD DEVIATION = 5.53693E-15
MEAN ERROR = 1.23810E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+4.99	+144.56	0.00000	0.000000	0.00000
2	0.000	+0.0	+1187.94	+307.37	0.00000	0.000000	0.00000
3	0.000	+0.0	-.30	+.98	0.00000	0.000000	0.00000
4	0.000	+0.0	-.32	+.03	0.00000	0.000000	0.00000
5	.551	+0.0	-6.09	+29.35	-.00122	.001258	.00687
6	.551	+2.1	+52.87	+34.46	.01046	.001477	.14618
7	.551	+3.1	+81.63	+39.60	.01637	.001695	.24952
8	.551	+4.0	+112.66	+45.84	.02260	.001962	.34949
9	.550	+5.0	+154.62	+56.69	.03109	.002433	.45492
10	.550	+6.0	+196.33	+69.81	.03946	.002995	.52846
11	.550	+7.1	+253.82	+89.91	.05103	.003815	.61006
12	.551	+8.1	+304.56	+108.92	.06117	.004669	.65421
13	.551	+9.0	+354.33	+133.10	.07118	.005707	.67189
14	.551	+10.1	+412.26	+161.67	.08281	.006931	.69417
15	.550	+11.1	+463.25	+193.78	0.00000	0.000000	0.00000
16	.549	+11.1	+466.84	+193.34	0.00000	0.000000	0.00000
17	.550	+10.6	+447.56	+178.44	.09006	.007664	.71206
18	.551	+9.6	+389.44	+148.71	.07817	.006371	.69265
19	.550	+9.6	+391.26	+147.82	.07868	.006344	.70234
20	.551	+8.6	+328.74	+121.21	.06593	.005188	.65875
21	.551	+7.6	+286.69	+99.52	.05751	.004261	.65349
22	.550	+6.6	+227.83	+79.53	.04572	.003419	.57741
23	.551	+5.6	+184.30	+64.06	.03702	.002746	.52358
24	.550	+4.6	+142.21	+52.48	.02861	.002254	.43359
25	.550	+3.5	+101.26	+43.08	.02037	.001849	.31728
26	.551	+2.5	+67.18	+36.48	.01349	.001564	.20237
27	.550	-.0	+14.30	+30.55	.00288	.001311	.02375
28	0.000	-.0	+.32	+.03	0.00000	0.000000	0.00000
29	0.000	-.0	+7.62	+144.56	0.00000	0.000000	0.00000
30	0.000	-.0	+1189.86	+307.77	0.00000	0.000000	0.00000
31	0.000	-.0	+.32	+.48	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0002694 +1.28135(Ct)^1.5 +72.782(Ct)^3

STANDARD DEVIATION = 4.17399E-14
MEAN ERROR = -9.33333E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-2.29	+1.12	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.64	+259.34	0.00000	0.000000	0.00000
3	0.000	+0.0	+.02	+.15	0.00000	0.000000	0.00000
4	0.000	+0.0	+.03	+.00	0.00000	0.000000	0.00000
5	.550	+3.2	+7.62	+1.48	.01350	.002731	.19114
6	.550	+3.3	+8.17	+1.13	.01447	.002095	.27640
7	.550	+3.3	+7.93	+1.01	.01405	.001858	.29829
8	.550	+3.7	+7.74	+1.36	.01371	.002508	.21309
9	.550	+5.2	+11.16	+1.67	.01977	.003091	.29921
10	.550	+6.5	+15.55	+2.05	.02753	.003791	.40097
11	.550	+5.9	+14.52	+1.92	.02571	.003549	.38647
12	.550	+7.9	+18.76	+2.99	.03312	.005534	.36237
13	.550	+9.3	+25.39	+3.98	.04497	.007357	.43128
14	.550	+11.7	+31.43	+5.03	.05566	.009394	.46506
15	.550	+12.9	+36.92	+6.75	0.00000	0.000000	0.00000
16	.550	+11.4	+31.83	+5.60	0.00000	0.000000	0.00000
17	.550	+11.8	+31.87	+5.47	.05644	.010117	.44097
18	.550	+10.1	+26.94	+4.23	.04772	.007818	.44365
19	.550	+10.5	+27.81	+4.41	.04783	.008153	.42694
20	.550	+9.8	+25.69	+4.01	.04550	.007417	.43532
21	.550	+5.8	+13.96	+1.82	.02471	.003372	.38342
22	.550	+4.4	+12.86	+1.51	.02277	.002790	.40964
23	.550	+3.4	+9.77	+1.43	.01730	.002644	.28624
24	.550	+3.4	+9.59	+1.49	.01698	.002753	.26735
25	.550	+.8	+4.68	+.83	.00829	.001531	.16409
26	.550	+2.6	+4.62	+.64	.00819	.001187	.28782
27	.550	+1.8	+4.17	+1.16	.00738	.002136	.09878
28	0.000	+0.0	-.03	+.00	0.00000	0.000000	0.00000
29	0.000	+0.0	-2.57	+1.23	0.00000	0.000000	0.00000
30	0.000	+0.0	-564.84	+259.09	0.00000	0.000000	0.00000
31	0.000	+0.0	+.03	+.00	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 125 DATE :28 MARCH 1983 9:50 OAT= 51.5 BAROMETER= 29.64 WET BULB TEMP = 50.5 DRY BULB TEMP= 51.5
WIND CONDITIONS :LIGHT 0 to 2 kts WEST Z/R= 3
SUMMARY:9-70 w/ 20-Deg 35 Deg DOUBLE SWEEP/ PUSHER TAIL ROTOR

CONFIGURATION FILE : DATA9 $70[I1]WEKT/WTail New Torque
DATA FILE : TIP125:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.22396 in. = 4.68533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0815251

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :2 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001036 +.69734(Ct)^1.5 +283.105(Ct)^3

STANDARD DEVIATION = 7.55410E-16
MEAN ERROR = 1.48143E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+6.64	+144.29	0.00000	0.000000	0.00000
2	0.000	+0.0	+1187.72	+307.64	0.00000	0.000000	0.00000
3	0.000	+0.0	-.51	+.71	0.00000	0.000000	0.00000
4	0.000	+0.0	+.01	+0.00	0.00000	0.000000	0.00000
5	.601	+.5	+18.27	+36.17	.00308	.001303	.02653
6	.601	+.5	+19.18	+36.49	.00324	.001315	.02830
7	.600	+2.2	+62.51	+40.69	.01056	.001467	.14936
8	.600	+3.1	+92.97	+45.77	.01572	.001652	.24095
9	.600	+4.1	+130.30	+54.57	.02207	.001972	.33580
10	.601	+5.1	+186.15	+68.14	.03142	.002455	.45803
11	.600	+6.1	+237.32	+83.64	.04012	.003018	.53758
12	.600	+7.1	+291.08	+102.89	.04929	.003718	.59410
13	.600	+8.1	+354.65	+127.85	.05998	.004615	.64265
14	.600	+9.1	+418.44	+157.48	.07075	.005683	.66855
15	.600	+10.1	+481.81	+193.06	.08145	.006966	.67376
16	.601	+10.8	+523.63	+218.20	.08839	.007861	.67487
17	.600	+11.1	+546.75	+231.50	.09254	.008363	.67964
18	.600	+10.6	+509.22	+207.57	.08621	.007500	.68140
19	.599	+10.6	+512.46	+206.94	.08702	.007573	.68440
20	.600	+10.1	+479.30	+190.32	.08110	.006873	.67848
21	.600	+9.6	+448.61	+172.98	.07590	.006244	.67620
22	.600	+9.0	+417.68	+156.61	.07062	.005651	.67045
23	.601	+8.5	+386.75	+141.37	.06528	.005093	.66123
24	.600	+7.6	+332.56	+116.55	.05618	.004202	.63976
25	.600	+6.6	+269.70	+93.31	.04567	.003372	.58431
26	.600	+5.5	+208.47	+74.32	.03523	.002681	.49802
27	.600	+4.6	+158.77	+61.05	.02682	.002201	.40287
28	.600	+3.6	+114.09	+50.43	.01931	.001822	.29739
29	.600	+2.6	+75.20	+43.06	.01272	.001555	.18637
30	.600	+1.5	+47.19	+38.36	.00797	.001383	.10391
31	.600	+.1	+13.13	+36.09	.00222	.001303	.01621
32	0.000	+.1	-.01	+0.00	0.00000	0.000000	0.00000
33	0.000	+.1	-.01	+0.00	0.00000	0.000000	0.00000
34	0.000	+.1	+1187.68	+307.58	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0003112 +1.15110(Ct)^1.5 +91.479(Ct)^3

STANDARD DEVIATION = 5.57115E-14
MEAN ERROR = -1.09259E-14

Pt.	Tip Mn	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-2.06	+1.22	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.44	+259.19	0.00000	0.000000	0.00000
3	0.000	+0.0	+.23	+.00	0.00000	0.000000	0.00000
4	0.000	+0.0	+.07	+.00	0.00000	0.000000	0.00000
5	.600	+.0	+1.53	+1.21	.00228	.001983	.01929
6	.600	+5.3	+7.84	+1.44	.01168	.002236	.18780
7	.600	+5.3	+9.00	+1.13	.01341	.001763	.29388
8	.600	+5.3	+9.23	+1.48	.01375	.002293	.23398
9	.600	+6.4	+11.78	+1.69	.01755	.002633	.29390
10	.600	+6.4	+11.53	+1.63	.01718	.002537	.29524
11	.600	+8.0	+16.73	+2.07	.02492	.003212	.40768
12	.600	+7.9	+19.41	+2.93	.02893	.004549	.35988
13	.600	+8.2	+20.88	+2.99	.03112	.004652	.39263
14	.600	+10.5	+27.67	+4.32	.04123	.006719	.41468
15	.600	+12.3	+36.60	+5.77	.05454	.008967	.47261
16	.600	+13.9	+43.95	+7.52	.06489	.011698	.47018
17	.600	+13.9	+44.02	+7.51	.06559	.011679	.47852
18	.600	+12.7	+40.50	+6.68	.06035	.010381	.47524
19	.600	+11.8	+35.35	+5.44	.05267	.008455	.47566
20	.600	+11.3	+34.07	+5.38	.05077	.008367	.45485
21	.600	+11.1	+30.56	+4.51	.04553	.007005	.46148
22	.600	+10.7	+30.62	+4.35	.04562	.006764	.47939
23	.600	+9.5	+25.32	+3.88	.03773	.006035	.40401
24	.600	+8.1	+20.54	+2.84	.03061	.004423	.48294
25	.600	+5.8	+13.85	+1.81	.02064	.002807	.35137
26	.600	+0.0	+14.47	+1.79	.02157	.002783	.37960
27	.600	+.2	+10.38	+1.49	.01547	.002316	.27641
28	.600	+2.6	+8.22	+1.37	.01225	.002134	.21150
29	.600	+2.0	+7.46	+1.31	.01111	.002044	.19063
30	.600	+1.9	+6.14	+1.29	.00914	.002004	.14511
31	.600	+2.0	+5.35	+1.33	.00796	.002061	.11477
32	0.000	-1.2	-.07	+.00	0.00000	0.000000	0.00000
33	0.000	-1.2	-.07	+.00	0.00000	0.000000	0.00000
34	0.000	-1.2	-564.44	+259.00	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 126 DATE :20 MARCH 1983 10:57 OAT= 52.5 BAROMETER= 29.635 WET BULB TE
MP= 51 DRY BULB TEMP= 52.5
WIND CONDITIONS :LIGHT 0 to 2 kts WEST Z/R= 3
SUMMARY:S-76 w/ 20 Deg 35 Deg DOUBLE SWEEP/ PUSHER TAIL ROTOR

CONFIGURATION FILE : DATA9 $76(((JWEXT/wTail/New Torque
DATA FILE : TIP126:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 56.22396 in. = 4.68533 ft.
  CHORD : 3.6 in. = .3 ft.
  SOLIDITY : .0819251

TAIL BLADE PROPERTIES :
  RADIUS : 11.499996 in. = .958333 ft.
  CHORD : 2.000004 in. = .166667 ft.
  SOLIDITY : .221433

PROCESSING DATE :2 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001055 +.68479(Ct)^1.5 +306.050(Ct)^3

STANDARD DEVIATION = 4.69042E-15
MEAN ERROR = -1.00000E-15

Pt.	Tip Mθ	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+7.30	+144.17	0.00000	0.000000	0.00000
2	0.000	+0.0	+1190.24	+307.64	0.00000	0.000000	0.00000
3	0.000	+0.0	+2.01	+.71	0.00000	0.000000	0.00000
4	0.000	+0.0	+.00	+0.00	0.00000	0.000000	0.00000
5	.650	+.1	-9.41	+42.85	-.00136	.001320	.00765
6	.650	+.1	-10.81	+42.65	-.00156	.001313	.00947
7	.650	+2.0	+62.77	+46.44	.00905	.001429	.12162
8	.649	+3.0	+103.84	+53.35	.01500	.001645	.22551
9	.650	+4.1	+148.98	+64.03	.02148	.001970	.32260
10	.650	+5.1	+209.91	+78.27	.03029	.002410	.44150
11	.649	+6.0	+271.02	+95.50	.03916	.002945	.53128
12	.650	+7.1	+345.89	+120.54	.04989	.003711	.60628
13	.649	+8.1	+422.26	+151.66	.06096	.004673	.65029
14	.650	+9.1	+487.78	+184.83	.07036	.005684	.66294
15	.650	+10.1	+561.99	+225.68	.08110	.006951	.67081
16	.649	+10.5	+594.15	+243.94	.08598	.007535	.67562
17	.650	+9.5	+524.47	+200.86	.07558	.006178	.67904
18	.650	+8.5	+459.83	+166.25	.06622	.005110	.67327
19	.650	+7.5	+366.00	+130.27	.05277	.004008	.61052
20	.650	+7.5	+371.61	+130.98	.05351	.004026	.62088
21	.649	+19.1	+302.48	+106.05	0.00000	0.000000	0.00000
22	.650	+6.5	+301.24	+106.24	.04346	.003272	.55922
23	.650	+5.5	+237.94	+85.16	.03426	.002617	.48918
24	.649	+4.5	+173.32	+68.83	.02502	.002120	.37674
25	.650	+3.5	+120.64	+57.32	.01739	.001763	.26252
26	.650	+2.4	+77.56	+48.89	.01118	.001504	.15869
27	.650	+1.5	+46.86	+44.37	.00675	.001364	.09206
28	.650	+.1	-8.15	+42.25	-.00118	.001300	.00626
29	0.000	+.1	-.00	+0.00	0.00000	0.000000	0.00000
30	0.000	+.1	+7.30	+144.17	0.00000	0.000000	0.00000
31	0.000	+.1	+1188.23	+307.88	0.00000	0.000000	0.00000
32	0.000	+.1	-.14	+.55	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0002818 +1.27764(Ct)^1.5 +33.134(Ct)^3

STANDARD DEVIATION = 9.17690E-15
MEAN ERROR = -1.95652E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-2.20	+1.35	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.52	+259.19	0.00000	0.000000	0.00000
3	0.000	+0.0	+.15	+.00	0.00000	0.000000	0.00000
4	0.000	+0.0	+.10	+.00	0.00000	0.000000	0.00000
5	.645	+5.1	+5.06	+1.32	.00651	.001767	.09900
6	.645	+6.8	+7.57	+1.91	.00974	.002025	.15809
7	.645	+6.8	+8.01	+1.45	.01031	.001949	.17852
8	.645	+6.8	+8.08	+1.48	.01040	.001981	.17823
9	.645	+8.2	+11.41	+1.60	.01468	.002147	.27574
10	.645	+9.2	+15.72	+1.96	.02023	.002631	.36402
11	.645	+10.2	+18.36	+2.93	.02363	.003938	.30692
12	.645	+11.3	+23.17	+3.18	.02982	.004264	.40179
13	.645	+12.2	+30.22	+4.45	.03888	.005976	.42697
14	.645	+12.7	+32.11	+4.56	.04133	.006126	.45633
15	.645	+14.0	+39.21	+6.04	.05046	.008112	.46488
16	.645	+14.6	+41.82	+6.73	.05382	.009036	.45974
17	.645	+13.2	+33.91	+5.50	.04365	.007389	.41064
18	.645	+12.0	+28.21	+4.22	.03630	.005662	.40645
19	.645	+10.2	+25.35	+3.55	.03263	.004762	.41183
20	.645	+11.6	+24.62	+3.50	.03168	.004702	.39898
21	.645	+51.8	+18.84	+2.83	0.00000	0.000000	0.00000
22	.645	+7.8	+18.29	+2.87	.02354	.003849	.31229
23	.645	+5.8	+12.86	+1.66	.01655	.002229	.31788
24	.645	+4.3	+13.87	+1.66	.01682	.002235	.32478
25	.645	+4.8	+9.17	+1.50	.01180	.002011	.21200
26	.645	+4.8	+8.32	+1.42	.01070	.001913	.19264
27	.645	+4.4	+7.84	+1.38	.01009	.001859	.18139
28	.645	+4.1	+7.36	+1.48	.00947	.001994	.15373
29	0.000	+0.0	-.10	+.00	0.00000	0.000000	0.00000
30	0.000	+0.0	-2.85	+1.34	0.00000	0.000000	0.00000
31	0.000	+0.0	-565.11	+259.22	0.00000	0.000000	0.00000
32	0.000	+0.0	+.15	+.00	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 127 DATE :20 MARCH 1983 13:45 OAT= 59.5 BAROMETER= 29.621 WET BULB TE
MP= 55.5 DRY BULB TEMP= 59.5
WIND CONDITIONS :LIGHT 0 to 2 kts WEST Z/R= 1.2
SUMMARY:S-70 W/ 20 Deg 35 Deg DOUBLE SWEEP/ PUSHER TAIL ROTOR

CONFIGURATION FILE : DATA9 S70(III)WEXT/WTail New Torque
DATA FILE : TIP127:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.22396 in. = 4.68533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0815291

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :2 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001056 +.67829(Ct)^1.5 +227.893(Ct)^3

STANDARD DEVIATION = 4.89898E-15
MEAN ERROR = 1.00000E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+7.66	+144.26	0.00000	0.000000	0.00000
2	0.000	+0.0	+1187.92	+307.26	0.00000	0.000000	0.00000
3	0.000	+0.0	-.31	+1.09	0.00000	0.000000	0.00000
4	0.000	+0.0	+.33	+.41	0.00000	0.000000	0.00000
5	.601	+.0	-.89	+36.51	-.00015	.001316	.00028
6	.601	-.0	-4.23	+36.10	-.00071	.001301	.00296
7	.601	+2.0	+60.18	+41.21	.01016	.001485	.13922
8	.601	+3.0	+96.67	+46.86	.01630	.001687	.24914
9	.601	+4.0	+136.83	+55.96	.02311	.002017	.35158
10	.601	+4.9	+181.91	+67.12	.03073	.002420	.44937
11	.601	+6.0	+244.94	+84.95	.04132	.003059	.55444
12	.600	+7.0	+308.18	+106.33	.05210	.003836	.62579
13	.601	+8.0	+373.43	+130.97	.06308	.004722	.67743
14	.600	+9.0	+439.94	+160.77	.07454	.005814	.70675
15	.601	+10.1	+512.36	+200.36	.08640	.007211	.71107
16	.601	+11.0	+570.93	+234.74	.09626	.008447	.71382
17	.600	+11.0	+568.17	+232.88	.09631	.008425	.71623
18	.601	+10.4	+533.12	+211.85	.09008	.007633	.71414
19	.601	+9.8	+498.94	+192.05	.08429	.006925	.71349
20	.601	+9.4	+470.33	+177.91	.07942	.006412	.70475
21	.601	+8.5	+404.38	+145.64	.06828	.005242	.68592
22	.601	+7.5	+340.96	+117.53	.05754	.004234	.65828
23	.601	+6.4	+278.42	+94.27	.04698	.003390	.60502
24	.601	+5.5	+217.26	+75.22	.03669	.002747	.51645
25	.601	+4.4	+162.57	+61.37	.02744	.002211	.41507
26	.601	+3.4	+112.29	+50.67	.01896	.001826	.28861
27	.601	+2.5	+80.18	+43.97	.01354	.001585	.20076
28	.600	+1.4	+48.84	+38.84	.00826	.001401	.10808
29	.601	-.1	-4.26	+35.94	-.00072	.001296	.00300
30	0.000	-.1	-.33	+.41	0.00000	0.000000	0.00000
31	0.000	-.1	+7.66	+144.66	0.00000	0.000000	0.00000
32	0.000	-.1	+1186.23	+308.03	0.00000	0.000000	0.00000
33	0.000	-.1	-.33	+.14	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0002947 +1.20074(Ct)^1.5 +131.945(Ct)^3

STANDARD DEVIATION = 4.95777E-14
MEAN ERROR = -1.01200E-14

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-1.85	+1.43	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.69	+259.27	0.00000	0.000000	0.00000
3	0.000	+0.0	-.03	+.07	0.00000	0.000000	0.00000
4	0.000	+0.0	-.03	+.05	0.00000	0.000000	0.00000
5	.601	+4.7	+3.88	+1.05	.00577	.001635	.08911
6	.601	+6.2	+8.07	+1.58	.01199	.002319	.18826
7	.601	+6.2	+8.00	+1.28	.01189	.001982	.21770
8	.601	+6.2	+7.65	+1.42	.01137	.002198	.16377
9	.601	+7.8	+12.30	+1.65	.01828	.002550	.32240
10	.601	+7.8	+11.71	+1.61	.01740	.002497	.30578
11	.601	+9.3	+16.49	+2.04	.02450	.003168	.40270
12	.601	+9.8	+20.91	+2.92	.03107	.004534	.40184
13	.601	+10.8	+22.73	+3.07	.03378	.004764	.43357
14	.601	+12.1	+30.55	+4.77	.04540	.007399	.43498
15	.601	+14.0	+37.93	+6.45	.05635	.009994	.44539
16	.601	+14.0	+38.75	+6.50	.05757	.010079	.45606
17	.601	+14.9	+40.31	+6.98	.05990	.010815	.45103
18	.601	+13.7	+34.56	+6.03	.05135	.009353	.41396
19	.601	+13.8	+36.59	+6.21	.05437	.009632	.43793
20	.601	+12.7	+32.92	+5.34	.04891	.008276	.43492
21	.601	+10.8	+24.93	+4.06	.03704	.006296	.37670
22	.601	+9.6	+23.29	+3.35	.03460	.005189	.41272
23	.601	+7.8	+16.19	+2.52	.02406	.003912	.31737
24	.601	+4.6	+15.20	+1.87	.02258	.002897	.38968
25	.601	+4.1	+12.25	+1.51	.01819	.002345	.34823
26	.601	+3.5	+9.03	+1.42	.01341	.002197	.23524
27	.601	+3.4	+6.52	+1.23	.00968	.001912	.16585
28	.601	+3.9	+6.01	+1.32	.00893	.002039	.13769
29	.601	+3.6	+5.95	+1.36	.00883	.002101	.13145
30	0.000	+0.0	+.03	+.05	0.00000	0.000000	0.00000
31	0.000	+0.0	-1.23	+1.42	0.00000	0.000000	0.00000
32	0.000	+0.0	-564.67	+258.98	0.00000	0.000000	0.00000
33	0.000	+0.0	+.18	+.06	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 128 DATE :29 MARCH 1983 OAT= 58.5 BAROMETER= 29.38 WET BULB TEMP= 49
DRY BULB TEMP= 58.5
WIND CONDITIONS :GUSTY 0 to 4 kts $SE Z/R= .75
SUMMARY:$-70 w/ 20 Deg-35 Deg DOUBLE SWEEP/ PUSHER TAIL ROTOR

CONFIGURATION FILE : DATA9 $70[[[]WEKT/wTail/New Torque
DATA FILE : TIP128:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 56.22396 in. = 4.68533 ft.
  CHORD : 3.6 in. = .3 ft.
  SOLIDITY : .0815251

TAIL BLADE PROPERTIES :
  RADIUS : 11.499996 in. = .958333 ft.
  CHORD : 2.000004 in. = .166667 ft.
  SOLIDITY : .221433

PROCESSING DATE :2 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001057 +.66985(Ct)^1.5 +191.787(Ct)^3

STANDARD DEVIATION = 1.83538E-15
MEAN ERROR = -3.91304E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+5.18	+144.68	0.00000	0.000000	0.00000
2	0.000	+0.0	+1188.43	+307.57	0.00000	0.000000	0.00000
3	0.000	+0.0	+.20	+.78	0.00000	0.000000	0.00000
4	0.000	+0.0	+.07	+.15	0.00000	0.000000	0.00000
5	0.000	+0.0	-.07	+.15	0.00000	0.000000	0.00000
6	.602	+.0	+.42	+36.79	.00007	.001307	.00009
7	.601	+2.0	+39.77	+41.17	.00997	.001465	.13709
8	.602	+3.1	+96.97	+47.37	.01613	.001683	.24564
9	.606	+4.0	+139.55	+56.21	.02289	.001968	.35529
10	.601	+5.1	+193.62	+70.10	.03230	.002496	.46959
11	.601	+6.1	+260.50	+88.51	.04343	.003149	.58817
12	.601	+7.1	+328.71	+112.38	.05489	.004005	.64825
13	.301	+8.0	+165.25	+141.15	0.00000	0.000000	0.00000
14	.601	+8.0	+391.28	+135.71	.06526	.004831	.69673
15	.601	+9.1	+469.73	+168.99	.07841	.006020	.73628
16	.600	+10.1	+525.18	+200.03	.08785	.007141	.73613
17	.601	+10.7	+573.25	+227.04	.09564	.008084	.73866
18	.600	+10.5	+552.23	+216.35	.09234	.007721	.73370
19	.600	+10.0	+522.89	+198.24	.08743	.007075	.73777
20	.601	+9.5	+494.91	+183.28	.08264	.006529	.73464
21	.601	+8.5	+421.58	+156.81	.07027	.005337	.70473
22	.601	+7.5	+357.06	+120.95	.05957	.004307	.68156
23	.601	+6.5	+287.65	+96.97	.04804	.003457	.61508
24	.601	+5.5	+227.98	+78.56	.03805	.002799	.53532
25	.601	+4.5	+164.15	+62.52	.02737	.002225	.41092
26	.601	+3.5	+120.13	+51.81	.02005	.001846	.31053
27	.601	+2.5	+86.41	+44.90	.01442	.001600	.21864
28	.601	+1.6	+49.32	+39.24	.00823	.001398	.10798
29	.601	+.0	-1.74	+36.97	-.00029	.001316	.00076
30	0.000	+.0	-.00	+.35	0.00000	0.000000	0.00000
31	0.000	+.0	+5.26	+145.12	0.00000	0.000000	0.00000
32	0.000	+.0	+1188.48	+308.14	0.00000	0.000000	0.00000
33	0.000	+.0	-.00	+.25	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0002720 +1.36143(Ct)^1.5 -23.538(Ct)^3

STANDARD DEVIATION = 5.79164E-14
MEAN ERROR = -1.23479E-14

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-1.93	+1.40	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.51	+258.94	0.00000	0.000000	0.00000
3	0.000	+0.0	+.16	+.25	0.00000	0.000000	0.00000
4	0.000	+0.0	-.00	+.24	0.00000	0.000000	0.00000
5	0.000	+0.0	+.00	+.24	0.00000	0.000000	0.00000
6	.606	+3.5	+7.12	+1.60	.01029	.002419	.14348
7	.606	+3.8	+7.49	+1.50	.01081	.002296	.16581
8	.606	+5.2	+8.27	+1.24	.01195	.001866	.23302
9	.606	+7.0	+11.18	+1.83	.01615	.002753	.24883
10	.606	+7.3	+15.91	+2.01	.02299	.003034	.30228
11	.606	+7.3	+13.63	+1.93	.01969	.002913	.31548
12	.606	+9.2	+19.83	+3.16	.02864	.004758	.33900
13	.606	+10.2	+13.43	+.94	0.00000	0.000000	0.00000
14	.606	+10.2	+21.42	+3.19	.03094	.004815	.37606
15	.606	+11.2	+23.51	+3.65	.03396	.005503	.37941
16	.606	+13.2	+34.57	+5.64	.04994	.008500	.43683
17	.606	+14.3	+40.94	+6.77	.05914	.010202	.46909
18	.606	+13.8	+38.89	+6.31	.05618	.009512	.46578
19	.606	+12.8	+34.39	+5.34	.04968	.008047	.45790
20	.606	+12.8	+35.95	+5.63	.05193	.008491	.46372
21	.606	+9.7	+25.99	+3.86	.03755	.005824	.41566
22	.606	+8.6	+18.76	+2.66	.02710	.004012	.36993
23	.606	+8.6	+18.28	+2.65	.02641	.003997	.35724
24	.606	+7.3	+16.14	+1.96	.02332	.002955	.40101
25	.606	+6.9	+11.86	+1.66	.01713	.002508	.29749
26	.606	+6.1	+9.59	+1.46	.01386	.002203	.24648
27	.606	+6.1	+8.97	+1.16	.01296	.001741	.28196
28	.606	+4.1	+7.81	+1.10	.01128	.001659	.24029
29	.606	+2.8	+4.08	+1.24	.00589	.001868	.08055
30	0.000	+0.0	-.00	+.22	0.00000	0.000000	0.00000
31	0.000	+0.0	-2.88	+1.27	0.00000	0.000000	0.00000
32	0.000	+0.0	-564.26	+259.49	0.00000	0.000000	0.00000
33	0.000	+0.0	-.01	+.25	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 129 DATE :29 MARCH 1983 OAT= 44 BAROMETER= 29.921 WET BULB TEMP= 35 D
RY BULB TEMP= 44
WIND CONDITIONS :GUSTY 0 to 4 SE Σ/R= 3
SUMMARY:H-34 CALIBRATION RUN

CONFIGURATION FILE : DATA12 H34(III)/wTail/New Torque
DATA FILE : TIP129:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 54.24996 in. = 4.52083 ft.
  CHORD : 4.250004 in. = .354167 ft.
  SOLIDITY : .099747

TAIL BLADE PROPERTIES :
  RADIUS : 11.499996 in. = .958333 ft.
  CHORD : 2.000004 in. = .166667 ft.
  SOLIDITY : .221433

PROCESSING DATE :2 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001137 +.00273(Ct)^1.5 +138.401(Ct)^3

STANDARD DEVIATION = 6.79409E-15
MEAN ERROR = 1.41667E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+5.13	+144.26	0.00000	0.000000	0.00000
2	0.000	+0.0	+1188.10	+307.16	0.00000	0.000000	0.00000
3	0.000	+0.0	-.13	+1.20	0.00000	0.000000	0.00000
4	0.000	+0.0	+.15	+.41	0.00000	0.000000	0.00000
5	.601	+.0	+.20	+34.81	.00003	.001127	.00003
6	.600	+2.0	+30.52	+37.32	.00447	.001210	.05521
7	.601	+3.1	+71.93	+44.41	.01051	.001436	.16768
8	.600	+4.2	+130.19	+56.99	.01910	.001849	.31869
9	.601	+5.0	+173.44	+69.41	.02537	.002246	.40183
10	.601	+6.0	+233.31	+89.09	.03415	.002885	.48864
11	.600	+7.0	+299.48	+113.48	.04391	.003678	.55869
12	.601	+8.0	+362.69	+140.41	.05306	.004544	.60072
13	.600	+9.1	+431.33	+173.70	.06316	.005626	.63009
14	.600	+10.0	+489.56	+207.01	.07184	.006719	.63995
15	.600	+11.1	+555.88	+247.49	.08143	.008021	.64702
16	.601	+10.5	+522.91	+226.60	.07643	.007326	.64412
17	.600	+10.0	+496.79	+210.19	.07283	.006816	.64480
18	.601	+9.5	+460.12	+188.93	.06730	.006112	.63784
19	.599	+9.0	+419.90	+170.31	.06173	.005538	.61843
20	.600	+8.5	+387.92	+152.97	.05689	.004962	.61066
21	.601	+7.5	+329.95	+126.59	.04830	.004103	.57789
22	.601	+6.5	+271.47	+101.65	.03973	.003291	.53746
23	.600	+5.6	+207.13	+79.63	.03038	.002583	.45773
24	.600	+4.6	+153.75	+63.23	.02252	.002048	.36837
25	.601	+3.5	+104.23	+50.83	.01524	.001644	.25552
26	.601	+2.5	+61.21	+42.02	.00896	.001360	.13919
27	.601	+1.5	+29.21	+37.06	.00428	.001200	.05204
28	.601	+.0	+2.60	+35.09	.00038	.001136	.00146
29	0.000	+.0	-.15	+.41	0.00000	0.000000	0.00000
30	0.000	+.0	+5.13	+144.68	0.00000	0.000000	0.00000
31	0.000	+.0	+1188.09	+307.98	0.00000	0.000000	0.00000
32	0.000	+.0	-.15	+.53	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 130 DATE :30 MARCH 1983 9:00 OAT= 35.7 BAROMETER= 30.155 WET BULB TEM
P= 32.5 DRY BULB TEMP= 35.7
WIND CONDITIONS :VARIBLE 0-4 NW Z/R= 3
SUMMARY:S-76 W/ 60% TAPER/ NO TAIL ROTOR

CONFIGURATION FILE : DATA10 S76CIII]WEXT/WTail/New Torque
DATA FILE : TIP130:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 56.04 in. = 4.67 ft.
  CHORD : 3.899996 in. = .258333 ft.
  SOLIDITY : .0784325

TAIL BLADE PROPERTIES :
  RADIUS : 11.499996 in. = .958333 ft.
  CHORD : 2.000004 in. = .166667 ft.
  SOLIDITY : .221433

PROCESSING DATE :3 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000902 +.67691(Ct)^1.5 +370.015(Ct)^3

STANDARD DEVIATION = 2.16598E-15
MEAN ERROR = -5.10526E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+.52	+144.46	0.00000	0.000000	0.00000
2	0.000	+0.0	+1186.29	+306.99	0.00000	0.000000	0.00000
3	0.000	+0.0	-1.95	+1.2	0.00000	0.000000	0.00000
4	0.000	+0.0	+.00	+.20	0.00000	0.000000	0.00000
5	.601	-.0	+3.69	+31.02	.00071	.001282	.00278
6	.600	+2.0	+78.82	+39.69	.01522	.001641	.21468
7	.600	+4.0	+181.36	+61.47	.03504	.002543	.48402
8	.600	+5.0	+241.59	+80.37	.04667	.003325	.56907
9	.601	+6.0	+304.69	+101.89	.05880	.004211	.63548
10	.600	+7.0	+364.99	+128.21	.07062	.005312	.66299
11	.600	+8.0	+434.35	+163.28	.08402	.006760	.67608
12	.599	+9.0	+483.14	+195.48	0.00000	0.000000	0.00000
13	.599	+10.0	+528.09	+231.36	0.00000	0.000000	0.00000
14	.600	+9.5	+511.29	+214.48	0.00000	0.000000	0.00000
15	.600	+9.2	+497.48	+204.92	0.00000	0.000000	0.00000
16	.600	+8.5	+458.17	+179.17	0.00000	0.000000	0.00000
17	.600	+8.7	+472.99	+188.26	0.00000	0.000000	0.00000
18	.600	+7.4	+399.45	+145.85	.07716	.006000	.67040
19	.600	+6.9	+341.46	+115.43	.06601	.004778	.66607
20	.599	+7.5	+405.69	+147.24	.07859	.006186	.67696
21	.600	+7.2	+386.78	+138.18	.07476	.005716	.67111
22	.600	+6.8	+356.91	+124.69	.06889	.005154	.65844
23	.600	+5.5	+281.88	+92.88	.05448	.003844	.62082
24	.600	+4.5	+219.80	+72.27	.04246	.002990	.54923
25	.600	+3.5	+158.04	+55.47	.03057	.002298	.43649
26	.600	+3.0	+128.80	+48.91	.02489	.002024	.36409
27	.600	+2.5	+108.29	+44.63	.02094	.001848	.30768
28	.601	+1.0	+39.89	+33.47	.00770	.001383	.09164
29	.600	-.0	+7.89	+30.86	.00152	.001277	.00875
30	0.000	-.0	-.00	+.20	0.00000	0.000000	0.00000
31	0.000	-.0	+2.46	+144.89	0.00000	0.000000	0.00000
32	0.000	-.0	+1186.25	+307.76	0.00000	0.000000	0.00000
33	0.000	-.0	-.00	+.59	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 131 DATE :30 MARCH 83 OAT= 46 BAROMETER= 30.055 WET BULB TEMP= 15 DRY BULB TEMP= 46
WIND CONDITIONS :0-2 NW Z/R= 3
SUMMARY:3-76 WITH 40% TAPER AND PUSHER TAIL ROTOR

CONFIGURATION FILE : DATA10 976[[[]WBKT/WTail/New Torque
DATA FILE : TIP131IT14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.099996 in. = .258333 ft.
SOLIDITY : .0784325

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :2 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000906 +.69177(Ct)^1.5 +364.815(Ct)^3

STANDARD DEVIATION = 1.81815E-15
MEAN ERROR = 4.04762E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+7.19	+144.39	0.00000	0.000000	0.00000
2	0.000	+0.0	+1188.23	+307.22	0.00000	0.000000	0.00000
3	0.000	+0.0	-.01	+1.13	0.00000	0.000000	0.00000
4	0.000	+0.0	+.01	+.20	0.00000	0.000000	0.00000
5	.551	-.0	-1.59	+26.14	-.00037	.001298	.00102
6	.551	-.0	+.23	+26.12	.00005	.001297	.00005
7	.551	+2.1	+57.45	+31.92	.01320	.001571	.18124
8	.551	+3.1	+92.24	+38.19	.02123	.001882	.30835
9	.551	+4.0	+130.66	+46.80	.02998	.002300	.42365
10	.551	+5.2	+180.92	+62.25	.04151	.003059	.51893
11	.550	+6.2	+236.20	+79.02	.05442	.003889	.61106
12	.551	+7.0	+276.83	+94.27	.06354	.004633	.64873
13	.551	+8.0	+325.27	+117.09	.07476	.005763	.66562
14	.550	+9.1	+375.10	+144.27	.08642	.007117	.66981
15	.550	+9.5	+391.44	+155.13	.09031	.007664	.66458
16	.549	+9.5	+397.76	+156.97	.09197	.007772	.67347
17	.550	+10.1	+423.61	+174.77	0.00000	0.000000	0.00000
18	.551	+9.6	+399.07	+158.85	.09171	.007817	.66675
19	.551	+8.5	+353.71	+131.86	.08138	.006496	.67063
20	.551	+7.5	+305.17	+107.56	.07023	.005300	.65895
21	.551	+6.6	+253.15	+86.49	.05818	.004257	.61869
22	.552	+5.5	+205.31	+68.35	.04707	.003356	.57114
23	.551	+4.5	+161.43	+54.72	.03714	.002696	.49823
24	.551	+3.6	+116.69	+43.05	.02681	.002118	.38891
25	.551	+1.1	+32.82	+27.79	.00755	.001374	.08963
26	.551	+.0	+7.97	+26.00	.00183	.001281	.01150
27	0.000	+.0	-.01	+.20	0.00000	0.000000	0.00000
28	0.000	+.0	+7.19	+144.74	0.00000	0.000000	0.00000
29	0.000	+.0	+1188.23	+307.90	0.00000	0.000000	0.00000
30	0.000	+.0	+.79	+.41	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001196 +1.35137(Ct)^1.5 -82.214(Ct)^3

STANDARD DEVIATION = 1.61849E-14
MEAN ERROR = -3.61905E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-2.19	+1.25	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.66	+258.87	0.00000	0.000000	0.00000
3	0.000	+0.0	+.01	+.32	0.00000	0.000000	0.00000
4	0.000	+0.0	-.00	+.01	0.00000	0.000000	0.00000
5	.550	+.6	+1.39	+.37	.00241	.000681	.05790
6	.550	+4.4	+5.85	+.64	.00000	.001168	.23523
7	.550	+4.4	+6.70	+.64	.01167	.001166	.35976
8	.550	+3.7	+6.26	+.68	.01090	.001232	.30727
9	.550	+5.6	+8.02	+.70	.01396	.001279	.42925
10	.550	+6.3	+12.00	+1.64	.02090	.002981	.33732
11	.550	+7.7	+13.27	+1.69	.02310	.003075	.37997
12	.550	+8.7	18.51	+1.91	.03223	.003477	.55380
13	.550	+9.5	+20.32	+2.66	.03538	.004871	.45451
14	.550	+10.4	+23.67	+2.97	.04121	.005391	.51640
15	.550	+12.0	+30.99	+4.29	.05397	.007801	.53476
16	.550	+10.5	+23.39	+3.02	.04066	.005481	.49779
17	.550	+11.7	+27.68	+4.16	0.00000	0.000000	0.00000
18	.550	+11.8	+29.80	+4.25	.05189	.007716	.50967
19	.550	+9.6	+22.36	+2.86	.03892	.005188	.49252
20	.550	+8.1	+16.80	+1.72	.02924	.003122	.53294
21	.550	+6.8	+14.26	+1.60	.02483	.002899	.44915
22	.550	+5.7	+11.55	+1.55	.02012	.002824	.33626
23	.550	+3.6	+9.85	+1.34	.01716	.002438	.30668
24	.550	+1.8	+6.33	+.51	.01102	.000930	.41385
25	.550	+1.7	+4.65	+.45	.00809	.000810	.29920
26	.550	+.9	+4.33	+.46	.00754	.000835	.26075
27	0.000	+.9	+.00	+.01	0.00000	0.000000	0.00000
28	0.000	+.9	-1.88	+1.26	0.00000	0.000000	0.00000
29	0.000	+.9	-564.64	+258.71	0.00000	0.000000	0.00000
30	0.000	+.9	-.00	+.37	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN #.: 132 DATE :3 MARCH 83 OAT= 45.5 BAROMETER= 30.062 WET BULB TEMP= 35 DR
Y BULB TEMP= 45.5
WIND CONDITIONS :0-2 NW Z/R= 3
SUMMARY:S-76 WITH 60% TAPER AND PUSHER TAIL ROTOR

CONFIGURATION FILE : DATA10 -- S76[[[]WEKT/wTail/New Torque
DATA FILE : TIP132:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 56.04 in. = 4.67 ft.
  CHORD : 3.099996 in. = .258333 ft.
  SOLIDITY : .0704325

TAIL BLADE PROPERTIES :
  RADIUS : 11.499996 in. = .958333 ft.
  CHORD : 2.000004 in. = .166667 ft.
  SOLIDITY : .221433

PROCESSING DATE :2 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000912 +.68074(Ct)^1.5 +406.127(Ct)^3

STANDARD DEVIATION = 2.90908E-15
MEAN ERROR = -7.05556E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+6.16	+143.95	0.00000	0.000000	0.00000
2	0.000	+0.0	+1189.17	+307.56	0.00000	0.000000	0.00000
3	0.000	+0.0	+.94	+.79	0.00000	0.000000	0.00000
4	0.000	+0.0	+.92	+0.00	0.00000	0.000000	0.00000
5	.601	+.0	+.61	+31.47	.00012	.001302	.00019
6	.600	+2.0	+66.63	+37.81	.01290	.001568	.17546
7	.601	+3.1	+112.10	+46.22	.02165	.001912	.31279
8	.601	+4.1	+164.45	+58.37	.03171	.002418	.43963
9	.601	+5.0	+221.54	+74.18	.04282	.003070	.54161
10	.601	+6.2	+294.20	+100.58	.05682	.004159	.61107
11	.600	+7.0	+343.47	+121.26	.06652	.005029	.64020
12	.600	+8.0	+414.70	+153.17	.08021	.006346	.67207
13	.600	+9.0	+467.88	+187.15	.09061	.007761	.65952
14	.600	+8.5	+437.79	+169.26	.08486	.007025	.66032
15	.600	+8.2	+417.73	+157.47	.08092	.006532	.66133
16	.600	+7.5	+378.43	+135.59	.07332	.005625	.66231
17	.600	+6.5	+320.95	+109.43	.06227	.004547	.64141
18	.600	+5.5	+257.03	+85.78	.04973	.003554	.58555
19	.600	+4.5	+199.91	+66.58	.03871	.002760	.51770
20	.601	+3.5	+140.37	+51.87	.02713	.002146	.39064
21	.601	+1.2	+43.40	+33.96	.00839	.001406	.10261
22	.600	-.0	-1.59	+30.67	-.00031	.001272	.00000
23	0.000	-.0	-.92	+0.00	0.00000	0.000000	0.00000
24	0.000	-.0	+6.16	+144.26	0.00000	0.000000	0.00000
25	0.000	-.0	+1139.15	+307.72	0.00000	0.000000	0.00000
26	0.000	-.0	-1.05	+.55	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0003969 +.93248(Ct)^1.5 +162.385(Ct)^3

STANDARD DEVIATION = 1.39727E-14
MEAN ERROR = -3.38889E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-1.57	+.94	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.67	+259.28	0.00000	0.000000	0.00000
3	0.000	+0.0	-.00	+.09	0.00000	0.000000	0.00000
4	0.000	+0.0	-.00	+.00	0.00000	0.000000	0.00000
5	.606	+2.4	+5.38	+1.63	.00760	.002434	.09056
6	.606	+3.4	+7.77	+1.46	.01115	.002181	.17971
7	.606	+3.5	+7.49	+1.40	.01075	.002101	.17652
8	.606	+3.8	+8.88	+1.74	.01274	.002601	.18395
9	.606	+4.2	+13.17	+1.93	.01890	.002889	.29930
10	.606	+6.8	+18.81	+2.94	.02698	.004403	.33494
11	.606	+5.9	+18.45	+2.88	.02647	.004311	.33237
12	.606	+8.3	+27.02	+3.49	.03877	.005222	.48640
13	.606	+10.6	+34.60	+5.21	.04964	.007800	.47180
14	.606	+9.5	+31.95	+4.54	.04584	.006797	.48044
15	.606	+8.2	+25.94	+3.50	.03721	.005241	.45565
16	.606	+6.3	+20.35	+2.46	.02921	.003689	.45034
17	.606	+6.3	+19.71	+3.04	.02828	.004545	.34811
18	.606	+4.6	+14.96	+1.92	.02147	.002875	.36402
19	.606	+2.0	+10.86	+1.68	.01558	.002513	.25759
20	.606	+3.2	+11.78	+1.84	.01679	.002751	.26306
21	.606	-1.0	+4.60	+1.51	.00660	.002266	.07881
22	.606	-.0	+4.32	+1.11	.00620	.001665	.09765
23	0.000	-.0	+.00	+.00	0.00000	0.000000	0.00000
24	0.000	-.0	-2.19	+.68	0.00000	0.000000	0.00000
25	0.000	-.0	-564.67	+259.30	0.00000	0.000000	0.00000
26	0.000	-.0	+.01	+.32	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 133 DATE :3 MARCH 83 OAT= 44 BAROMETER= 30.065 WET BULB TEMP= 33.5 DR
Y BULB TEMP= 44
WIND CONDITIONS :0-2 NW Z/R= 3
SUMMARY:S-76 WITH 40% TAPER AND PUSHER TAIL ROTOR

CONFIGURATION FILE : DATA10 S76IIIiwEXT/wTail New Torque
DATA FILE : TIP133:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 56.04 in. = 4.67 ft.
  CHORD : 3.099996 in. = .258333 ft.
  SOLIDITY : .0704325

TAIL BLADE PROPERTIES :
  RADIUS : 11.499996 in. = .958333 ft.
  CHORD : 2.000004 in. = .166667 ft.
  SOLIDITY : .221433

PROCESSING DATE :2 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000918 +.67811(Ct)^1.5 +525.576(Ct)^3

STANDARD DEVIATION = 2.27538E-15
MEAN ERROR = -5.87500E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+6.19	+143.82	0.00000	0.000000	0.00000
2	0.000	+0.0	+1187.24	+307.50	0.00000	0.000000	0.00000
3	0.000	+0.0	-.99	+.85	0.00000	0.000000	0.00000
4	0.000	+0.0	-.99	+0.00	0.00000	0.000000	0.00000
5	.651	-.0	-3.86	+37.21	-.00064	.001311	.00229
6	.651	+2.2	+81.38	+45.07	.01339	.001587	.18307
7	.651	+3.1	+129.91	+53.56	.02139	.001889	.31090
8	.650	+4.1	+192.38	+69.46	.03173	.002453	.43237
9	.650	+5.0	+261.59	+88.52	.04312	.003125	.53777
10	.651	+6.0	+345.92	+119.82	.05691	.004221	.60357
11	.649	+7.1	+421.89	+153.95	.06988	.005461	.63486
12	.650	+8.2	+500.38	+200.04	.08266	.007077	.63815
13	.649	+9.2	+503.99	+202.16	.08334	.007158	.63069
14	.649	+8.6	+522.25	+216.28	0.00000	0.000000	0.00000
15	.651	+7.5	+462.79	+176.64	.07627	.006233	.63410
16	.652	+6.6	+391.48	+140.62	.06420	.004938	.61816
17	.651	+5.5	+314.32	+107.14	.05165	.003770	.58430
18	.652	+4.6	+243.04	+82.99	.03984	.002913	.51224
19	.651	+3.5	+163.22	+61.03	.02685	.002150	.38402
20	.652	+2.5	+101.72	+48.29	.01671	.001699	.23861
21	.651	+.1	+5.86	+36.42	.00096	.001282	.00437
22	0.000	+.1	+.99	+0.00	0.00000	0.000000	0.00000
23	0.000	+.1	+6.19	+143.84	0.00000	0.000000	0.00000
24	0.000	+.1	+1187.23	+307.56	0.00000	0.000000	0.00000
25	0.000	+.1	+1.63	+.79	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0003275 +.65833(Ct)^1.5 +454.529(Ct)^3

STANDARD DEVIATION = 8.71421E-15
MEAN ERROR = -2.25000E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-1.56	+1.18	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.67	+259.27	0.00000	0.000000	0.00000
3	0.000	+0.0	-.00	+.00	0.00000	0.000000	0.00000
4	0.000	+0.0	-.00	+.04	0.00000	0.000000	0.00000
5	.651	+6.3	+7.34	+1.49	.00914	.001931	.15048
6	.651	+7.9	+12.75	+1.63	.01586	.002120	.31351
7	.651	+7.2	+9.71	+1.58	.01209	.002057	.21491
8	.651	+7.6	+11.87	+1.64	.01478	.002125	.28125
9	.651	+6.3	+15.71	+1.74	.01955	.002253	.40360
10	.651	+9.0	+22.36	+3.07	.02783	.003980	.38804
11	.651	+9.5	+25.03	+3.00	.03115	.003898	.46935
12	.651	+12.7	+37.11	+5.15	.04618	.006692	.49333
13	.651	+12.1	+33.83	+4.50	.04210	.005842	.49191
14	.651	+12.7	+37.22	+5.54	0.00000	0.000000	0.00000
15	.651	+9.5	+27.88	+3.29	.03469	.004269	.50354
16	.651	+10.1	+24.90	+2.99	.03099	.003878	.46804
17	.651	+7.5	+17.10	+1.81	.02127	.002354	.43855
18	.651	+6.0	+13.17	+1.55	.01639	.002009	.34739
19	.651	+4.3	+10.82	+1.47	.01346	.001912	.27161
20	.651	+3.6	+8.91	+1.44	.01109	.001872	.20752
21	.651	+3.3	+4.86	+1.35	.00605	.001752	.08942
22	0.000	+0.0	+.00	+.04	0.00000	0.000000	0.00000
23	0.000	+0.0	-2.03	+1.18	0.00000	0.000000	0.00000
24	0.000	+0.0	-564.67	+259.27	0.00000	0.000000	0.00000
25	0.000	+0.0	+.00	+.04	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 134 DATE :31 MARCH 1983 OAT= 41 BAROMETER= 30.09 WET BULB TEMP= 33.5
DRY BULB TEMP= 41
WIND CONDITIONS :VERY LIGHT NORTH Z/R= 3
SUMMARY:PUSHER TAIL ROTOR/ REPEAT OF TIP086 & TIP106

CONFIGURATION FILE : DATA10 -- $76[[[]wEXT/wTail/New Torque
DATA FILE : TIP134:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 56.04 in. = 4.67 ft.
  CHORD : 3.099996 in. = .258333 ft.
  SOLIDITY : .0764325

TAIL BLADE PROPERTIES :
  RADIUS : 11.499996 in. = .958333 ft.
  CHORD : 2.000004 in. = .166667 ft.
  SOLIDITY : .221433

PROCESSING DATE :2 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0003171 +.81348(Ct)^1.5 +58.717(Ct)^3

STANDARD DEVIATION = 9.03529E-14
MEAN ERROR = -2.25882E-14

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-2.41	+.56	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.42	+258.96	0.00000	0.000000	0.00000
3	0.000	+0.0	+.25	+.23	0.00000	0.000000	0.00000
4	0.000	+0.0	+.08	+.24	0.00000	0.000000	0.00000
5	.599	-.1	+1.01	+.82	.00149	.001252	.01522
6	.599	+2.8	+1.76	+.87	.00258	.001338	.03264
7	.599	+5.2	+7.23	+1.08	.01059	.001655	.21908
8	.599	+7.1	+13.42	+2.10	.01968	.003220	.28525
9	.599	+9.3	+22.46	+2.43	.03293	.003723	.53393
10	.599	+11.6	+31.23	+3.75	.04578	.005728	.56893
11	.599	+13.6	+42.80	+5.21	.06273	.007970	.65594
12	.599	+15.7	+54.35	+7.63	.07967	.011673	.64098
13	.599	+17.5	+63.68	+9.87	.09335	.015096	.62863
14	.599	+16.4	+61.37	+8.87	.08996	.013571	.66157
15	.599	+14.2	+50.18	+6.29	.07358	.009625	.68957
16	.599	+11.8	+39.55	+4.98	.05797	.007612	.61016
17	.599	+10.1	+32.08	+3.64	.04703	.005567	.60955
18	.599	+7.5	+23.56	+2.49	.03453	.003808	.56074
19	.599	+5.7	+15.86	+1.93	.02324	.002958	.39850
20	.599	+2.2	+10.53	+1.77	.01544	.002703	.23609
21	.599	+1.6	+4.44	+.73	.00651	.001111	.15729
22	0.000	-.1	+1.21	+.69	0.00000	0.000000	0.00000
23	0.000	-.1	-.08	+.24	0.00000	0.000000	0.00000
24	0.000	-.1	-2.98	+.74	0.00000	0.000000	0.00000
25	0.000	-.1	-564.44	+258.96	0.00000	0.000000	0.00000
26	0.000	-.1	-.08	+.07	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 135 DATE :31 MARCH 1983 13:27 OAT= 45 BAROMETER= 30 WET BULB TEMP= 36
DRY BULB TEMP= 45
WIND CONDITIONS :LIGHT 0 to 2 kts NNW Z/R= 1.2
SUMMARY:S-76 w/ 60% TAPER/ PUSHER TAIL ROTOR

CONFIGURATION FILE : DATA10 S76(III)WEXT/wTail/New Torque
DATA FILE : TIP135:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 56.04 in. = 4.67 ft.
  CHORD : 3.099996 in. = .258333 ft.
  SOLIDITY : .0704325

TAIL BLADE PROPERTIES :
  RADIUS : 11.499996 in. = .958333 ft.
  CHORD : 2.000004 in. = .166667 ft.
  SOLIDITY : .221433

PROCESSING DATE :2 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000921 +.67245(Ct)^1.5 +317.736(Ct)^3

STANDARD DEVIATION = 4.00000E-16
MEAN ERROR = -1.00000E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+3.57	+144.42	0.00000	0.000000	0.00000
2	0.000	+0.0	+1187.26	+387.28	0.00000	0.000000	0.00000
3	0.000	+0.0	-.98	+1.07	0.00000	0.000000	0.00000
4	0.000	+0.0	-.97	+.20	0.00000	0.000000	0.00000
5	.601	+.0	-.17	+31.48	-.00003	.001306	.00003
6	.601	+2.2	+64.53	+37.63	.01250	.001561	.16801
7	.601	+3.0	+103.68	+44.42	.02007	.001841	.28976
8	.601	+4.0	+161.03	+57.24	.03113	.002370	.43497
9	.601	+5.0	+223.86	+73.55	.04335	.003050	.55539
10	.601	+6.0	+292.69	+96.34	.05662	.003994	.63398
11	.600	+7.1	+354.76	+122.30	.06881	.005068	.66684
12	.600	+8.0	+416.80	+151.07	.08103	.006259	.68827
13	.601	+9.0	+477.88	+185.36	0.00000	0.000000	0.00000
14	.601	+9.0	+473.81	+183.66	0.00000	0.000000	0.00000
15	.601	+8.6	+456.45	+171.00	.08840	.007092	.69555
16	.600	+7.5	+393.39	+138.71	.07639	.005768	.68696
17	.600	+7.5	+388.49	+135.61	.07551	.005644	.68986
18	.601	+6.5	+327.19	+109.64	.06335	.004546	.65824
19	.600	+5.5	+263.78	+85.96	.05119	.003572	.60843
20	.600	+4.5	+203.24	+67.35	.03944	.002799	.52520
21	.600	+3.5	+141.27	+51.69	.02741	.002148	.39655
22	.601	+2.4	+84.05	+40.47	.01629	.001680	.23229
23	.601	+.0	+2.75	+31.17	.00053	.001294	.00179
24	0.000	+.0	+.97	+.20	0.00000	0.000000	0.00000
25	0.000	+.0	+3.57	+144.83	0.00000	0.000000	0.00000
26	0.000	+.0	+1187.25	+388.03	0.00000	0.000000	0.00000
27	0.000	+.0	+.97	+.43	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0002536 +1.58545(Ct)^1.5 -195.822(Ct)^3

STANDARD DEVIATION = 1.81176E-14
MEAN ERROR = -2.52941E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-1.94	+1.42	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.52	+259.22	0.00000	0.000000	0.00000
3	0.000	+0.0	+.15	+.02	0.00000	0.000000	0.00000
4	0.000	+0.0	+.00	+.02	0.00000	0.000000	0.00000
5	.600	+4.3	+6.39	+1.10	.00930	.001692	.17868
6	.600	+4.5	+6.73	+1.29	.00989	.001975	.16599
7	.600	+4.5	+6.21	+1.33	.00913	.002043	.14202
8	.600	+5.0	+11.16	+1.44	.01639	.002203	.31680
9	.600	+6.4	+11.84	+1.65	.01739	.002522	.30261
10	.600	+8.4	+17.66	+2.62	.02593	.004021	.34560
11	.600	+9.4	+20.92	+3.59	.03072	.005506	.32539
12	.600	+9.7	+24.33	+3.80	.03573	.005824	.38586
13	.600	+12.0	+31.82	+5.17	0.00000	0.000000	0.00000
14	.600	+12.0	+32.63	+5.33	0.00000	0.000000	0.00000
15	.600	+11.3	+30.03	+4.65	.04410	.007122	.43269
16	.600	+10.5	+27.26	+4.11	.04003	.006291	.42362
17	.600	+9.1	+23.19	+3.78	.03406	.005795	.36092
18	.600	+8.2	+21.23	+3.10	.03118	.004748	.38595
19	.600	+6.2	+16.49	+2.60	.02422	.003979	.31513
20	.600	+4.4	+12.17	+1.71	.01788	.002624	.30310
21	.600	+4.7	+10.17	+1.39	.01494	.002137	.28430
22	.600	+4.5	+6.80	+1.33	.00999	.002033	.16342
23	.600	+1.7	+4.15	+1.22	.00610	.001875	.08451
24	0.000	+0.0	-.00	+.02	0.00000	0.000000	0.00000
25	0.000	+0.0	-1.79	+1.33	0.00000	0.000000	0.00000
26	0.000	+0.0	-564.51	+259.22	0.00000	0.000000	0.00000
27	0.000	+0.0	+.30	+.07	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 136 DATE :31 MARCH 1983 14:07 OAT= 46 BAROMETER= 29.99 WET BULB TEMP= 36 DRY BULB TEMP= 46
WIND CONDITIONS :LIGHT 0 to 2 kts NNW Z/R= .75
SUMMARY:S-76 w/ 60% TAPER PUSHER TAIL ROTOR

CONFIGURATION FILE : DATA10 S76[[[]WEXT/wTail/New Torque
DATA FILE : TIP136:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.099996 in. = .258333 ft.
SOLIDITY : .0704325

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :2 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000916 +.60664(Ct)^1.5 +319.600(Ct)^3

STANDARD DEVIATION = 3.06942E-15
MEAN ERROR = -7.44444E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+5.34	+143.93	0.00000	0.000000	0.00000
2	0.000	+0.0	+1189.03	+307.60	0.00000	0.000000	0.00000
3	0.000	+0.0	+.00	+.75	0.00000	0.000000	0.00000
4	0.000	+0.0	-1.19	+.04	0.00000	0.000000	0.00000
5	.601	+0.0	+2.51	+31.59	.00049	.001312	.00154
6	.600	+2.6	+91.51	+41.13	.01777	.001710	.25988
7	.601	+3.5	+144.57	+50.82	.02803	.002110	.41739
8	.600	+4.5	+204.35	+65.63	.03970	.002730	.54365
9	.600	+5.5	+277.19	+86.06	.05384	.003579	.65496
10	.600	+6.5	+342.76	+108.45	.06663	.004514	.71497
11	.600	+7.5	+406.26	+134.92	.07885	.005607	.74102
12	.600	+8.5	+466.59	+165.76	.09085	.006911	.74357
13	.599	+8.5	+467.77	+165.74	.09130	.006927	.74736
14	.600	+9.0	+494.21	+180.99	.09622	.007545	.74227
15	.601	+8.0	+440.56	+152.91	.08536	.006344	.73774
16	.601	+7.0	+379.72	+122.59	.07357	.005096	.73624
17	.599	+6.0	+317.66	+99.17	.06189	.004137	.69834
18	.601	+5.1	+249.69	+77.63	.04843	.003224	.62031
19	.600	+4.1	+187.04	+60.02	.03640	.002501	.52106
20	.600	+3.0	+120.30	+45.45	.02340	.001893	.35486
21	.600	+1.0	+33.20	+31.98	.00645	.001331	.07310
22	.600	-.1	+4.66	+30.94	.00091	.001287	.00398
23	0.000	-.1	+1.18	+.04	0.00000	0.000000	0.00000
24	0.000	-.1	+5.34	+144.24	0.00000	0.000000	0.00000
25	0.000	-.1	+1189.04	+307.76	0.00000	0.000000	0.00000
26	0.000	-.1	+.00	+.53	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0002938 +1.60520(Ct)^1.5 -171.008(Ct)^3

STANDARD DEVIATION = 6.64278E-15
MEAN ERROR = -1.61111E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-1.70	+1.39	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.29	+259.34	0.00000	0.000000	0.00000
3	0.000	+0.0	+.38	+.15	0.00000	0.000000	0.00000
4	0.000	+0.0	+.38	+.00	0.00000	0.000000	0.00000
5	.600	+4.3	+4.46	+1.27	.00655	.001941	.09084
6	.600	+5.9	+7.37	+1.37	.01082	.002095	.17988
7	.600	+7.5	+11.55	+1.65	.01696	.002828	.25993
8	.600	+8.4	+14.26	+2.38	.02094	.003643	.27673
9	.600	+8.1	+16.87	+2.56	.02477	.003918	.33111
10	.600	+9.4	+17.05	+2.60	.02502	.003990	.33015
11	.600	+12.1	+25.68	+4.28	.03770	.006562	.37120
12	.600	+13.1	+30.80	+5.06	.04522	.007750	.41292
13	.600	+13.1	+30.10	+5.12	.04419	.007837	.39444
14	.600	+13.5	+33.90	+5.50	.04978	.008432	.43822
15	.600	+12.0	+28.52	+4.83	.04186	.007396	.38536
16	.600	+10.1	+22.29	+3.62	.03273	.005539	.35567
17	.600	+8.5	+20.40	+3.22	.02995	.004930	.34975
18	.600	+6.7	+13.73	+2.49	.02015	.003814	.24960
19	.600	+5.1	+10.41	+1.42	.01528	.002179	.28630
20	.600	+2.9	+5.72	+1.24	.00840	.001896	.13521
21	.600	+1.8	+4.40	+1.23	.00646	.001885	.09161
22	.600	+5.5	+6.45	+1.36	.00946	.002085	.14697
23	0.000	+0.0	-.38	+.00	0.00000	0.000000	0.00000
24	0.000	+0.0	-2.32	+1.48	0.00000	0.000000	0.00000
25	0.000	+0.0	-564.48	+259.23	0.00000	0.000000	0.00000
26	0.000	+0.0	-.08	+.00	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 137 DATE :26 MARCH 1983 OAT= 46 BAROMETER= 29.956 WET BULB TEMP= 37 D
RY BULB TEMP= 46
WIND CONDITIONS :LIGHT GUSTS NNW Z/R= 3
SUMMARY:ISOLATED TAIL ROTOR REPEAT OF 086;106;134

CONFIGURATION FILE : DATA10 876[[[]WEXT/WTail/New Torque
DATA FILE : TIP137:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 56.04 in. = 4.67 ft.
  CHORD : 3.099996 in. = .258333 ft.
  SOLIDITY : .0704325

TAIL BLADE PROPERTIES :
  RADIUS : 11.499996 in. = .958333 ft.
  CHORD : 2.000004 in. = .166667 ft.
  SOLIDITY : .221433

PROCESSING DATE :3 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0003454 +.71206(Ct)^1.5 +90.935(Ct)^3

STANDARD DEVIATION = 5.88235E-14
MEAN ERROR = -1.47059E-14

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-2.03	+1.38	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.66	+259.20	0.00000	0.000000	0.00000
3	0.000	+0.0	+.01	+.00	0.00000	0.000000	0.00000
4	0.000	+0.0	-.01	+.00	0.00000	0.000000	0.00000
5	.600	-4.8	+1.28	+1.09	.00188	.001671	.01628
6	.600	-2.4	+1.77	+1.09	.00260	.001673	.02637
7	.600	+.1	+7.51	+1.36	.01102	.002086	.18446
8	.600	+2.4	+15.16	+1.55	.02225	.002367	.46634
9	.600	+4.4	+22.94	+2.77	.03367	.004245	.48424
10	.600	+6.4	+33.00	+3.47	.04844	.005320	.66686
11	.600	+8.9	+45.64	+5.64	.06699	.008636	.66906
12	.600	+10.7	+53.73	+7.37	.07886	.011283	.65309
13	.600	+9.8	+51.98	+6.83	.07629	.010467	.66989
14	.600	+7.6	+42.14	+5.09	.06186	.007792	.65697
15	.600	+4.9	+31.84	+3.83	.04673	.005861	.57339
16	.600	+2.9	+25.18	+2.77	.03696	.004241	.55755
17	.600	+1.8	+16.66	+1.55	.02446	.002380	.53473
18	.600	-1.0	+11.00	+1.36	.01614	.002087	.32689
19	.600	-3.5	+5.64	+1.20	.00828	.001836	.13661
20	.600	-5.1	+1.59	+1.10	.00234	.001677	.02246
21	.600	-7.5	+.76	+1.08	.00112	.001652	.00757
22	0.000	-7.5	+.01	+.00	0.00000	0.000000	0.00000
23	0.000	-7.5	-2.19	+1.38	0.00000	0.000000	0.00000
24	0.000	-7.5	-564.67	+259.19	0.00000	0.000000	0.00000
25	0.000	-7.5	+.01	+.00	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 130 DATE :4 APRIL 1983 OAT= 58 BAROMETER= 29.869 WET BULB TEMP= 52 DRY BULB TEMP= 58
WIND CONDITIONS :ZERO Z/R= 3
SUMMARY:8-76 w/ 60% TAPER/ TRACTOR TAIL ROTOR

CONFIGURATION FILE : DATA10 876(III)wEXT/wTail New Torque
DATA FILE : TIP130:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.099996 in. = .258333 ft.
SOLIDITY : .0704325

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :3 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000944 +.70616(Ct)^1.5 +328.765(Ct)^3

STANDARD DEVIATION = 6.89475E-15
MEAN ERROR = 1.67222E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+6.88	+144.60	0.00000	0.000000	0.00000
2	0.000	+0.0	+1187.92	+307.54	0.00000	0.000000	0.00000
3	0.000	+0.0	-.31	+.81	0.00000	0.000000	0.00000
4	0.000	+0.0	+.33	+.14	0.00000	0.000000	0.00000
5	.551	+.0	-2.12	+27.20	-.00049	.001351	.00151
6	.551	+2.1	+52.58	+32.24	.01219	.001601	.15780
7	.550	+4.0	+126.13	+46.85	.02933	.002333	.40410
8	.550	+5.0	+169.41	+58.68	.03945	.002926	.50257
9	.549	+6.1	+223.46	+76.44	.05208	.003815	.58471
10	.549	+7.1	+275.98	+97.46	.06450	.004888	.62993
11	.549	+8.1	+325.68	+120.89	.07612	.006010	.65573
12	.549	+9.0	+368.84	+143.66	.08602	.007174	.65990
13	.549	+9.6	+398.23	+158.77	.09283	.007926	.66972
14	.550	+10.2	+422.28	+176.96	0.00000	0.000000	0.00000
15	.549	+10.2	+422.65	+177.25	0.00000	0.000000	0.00000
16	.549	+9.5	+395.11	+157.81	.09236	.007859	.67021
17	.549	+8.6	+349.39	+131.82	.08158	.006548	.66716
18	.550	+7.5	+299.39	+107.61	.06971	.005365	.64374
19	.549	+6.5	+247.60	+85.15	.05773	.004251	.61228
20	.550	+5.5	+205.81	+67.87	.04774	.003385	.57840
21	.550	+4.5	+153.91	+53.61	.03584	.002674	.47632
22	.549	+3.5	+106.12	+41.70	.02475	.002083	.35083
23	.549	+2.5	+66.51	+34.13	.01553	.001707	.21293
24	.550	+.0	+2.89	+27.20	.00067	.001356	.00242
25	0.000	+.0	-.33	+.14	0.00000	0.000000	0.00000
26	0.000	+.0	+6.86	+144.94	0.00000	0.000000	0.00000
27	0.000	+.0	+1188.17	+307.93	0.00000	0.000000	0.00000
28	0.000	+.0	-.33	+.32	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0004759 +1.90421(Ct)^1.5 -180.914(Ct)^3

STANDARD DEVIATION = 3.29848E-14
MEAN ERROR = -8.00000E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-1.95	+1.83	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.04	+259.43	0.00000	0.000000	0.00000
3	0.000	+0.0	+.52	+.23	0.00000	0.000000	0.00000
4	0.000	+0.0	+.05	+.03	0.00000	0.000000	0.00000
5	.550	+2.2	+3.65	+1.31	.00642	.002399	.07142
6	.550	+4.1	+5.94	+1.95	.01044	.003577	.09922
7	.550	+5.0	+8.10	+2.29	.01424	.004193	.13488
8	.550	+5.9	+10.77	+2.38	.01894	.004366	.19861
9	.550	+6.9	+12.87	+2.61	.02263	.004797	.23610
10	.550	+8.2	+18.57	+4.10	.03265	.007518	.26112
11	.550	+8.0	+18.12	+3.62	.03186	.006644	.28478
12	.550	+10.6	+26.84	+5.51	.04718	.010101	.33758
13	.550	+11.4	+28.15	+6.01	.04950	.011017	.33258
14	.550	+12.7	+32.63	+7.15	0.00000	0.000000	0.00000
15	.550	+12.7	+33.73	+7.47	0.00000	0.000000	0.00000
16	.550	+12.4	+26.00	+5.65	.04572	.010360	.31370
17	.550	+10.3	+22.93	+4.74	.04032	.008701	.30959
18	.550	+9.0	+20.95	+4.37	.03684	.008013	.29359
19	.550	+6.6	+13.39	+2.93	.02354	.005377	.22344
20	.550	+5.0	+9.60	+2.16	.01687	.003965	.18386
21	.550	+5.8	+9.10	+2.16	.01599	.003957	.17004
22	.550	+3.8	+7.07	+1.70	.01243	.003124	.14762
23	.550	+2.1	+5.38	+1.66	.00945	.003042	.10051
24	.550	+3.4	+4.50	+1.33	.00792	.002440	.09603
25	0.000	+0.0	-.05	+.03	0.00000	0.000000	0.00000
26	0.000	+0.0	-1.95	+1.83	0.00000	0.000000	0.00000
27	0.000	+0.0	-564.04	+259.18	0.00000	0.000000	0.00000
28	0.000	+0.0	+.06	+.03	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 139 DATE :4 APRIL 1983 11:53 OAT= 59 BAROMETER= 29.[illegible] WET BULB TEMP= 52 DRY BULB TEMP= 59
WIND CONDITIONS :LIGHT 0 to 3 kts 0 Z/R= 3
SUMMARY:0=76 w/ 40% TAPER/ TRACTOR TAIL ROTOR

CONFIGURATION FILE : DATA10 [illegible]WEHT-wTail New Torque
DATA FILE : TIP139:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.999996 in. = .333333 ft.
SOLIDITY : .0704325

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :3 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000942 +.69348(Ct)^1.5 +396.782(Ct)^3

STANDARD DEVIATION = 1.21031E-15
MEAN ERROR = -3.12500E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+7.22	+144.16	0.00000	0.000000	0.00000
2	0.000	+0.0	+1188.22	+307.32	0.00000	0.000000	0.00000
3	0.000	+0.0	-.01	+1.03	0.00000	0.000000	0.00000
4	0.000	+0.0	+.00	+0.00	0.00000	0.000000	0.00000
5	.601	+.0	-2.59	+32.57	-.00050	.001358	.00153
6	.601	+2.0	+55.69	+36.00	.01085	.001505	.14095
7	.602	+3.0	+93.92	+43.93	.01826	.001829	.25316
8	.602	+4.0	+144.49	+54.50	.02809	.002269	.38941
9	.601	+5.0	+206.44	+71.44	.04018	.002977	.50757
10	.601	+6.0	+263.95	+91.93	.05136	.003830	.57022
11	.601	+7.0	+334.37	+118.74	.06506	.004947	.62948
12	.601	+8.1	+408.52	+154.63	.07954	.006447	.65297
13	.600	+9.0	+453.83	+182.39	0.00000	0.000000	0.00000
14	.602	+9.0	+458.63	+185.04	0.00000	0.000000	0.00000
15	.600	+8.6	+430.89	+167.91	.08407	.007015	.65209
16	.601	+7.6	+372.50	+136.01	.07257	.005674	.64662
17	.602	+6.5	+312.22	+106.93	.06080	.004445	.62990
18	.601	+.5	+246.37	+83.21	.04799	.003471	.56847
19	.602	+4.5	+185.73	+64.20	.03606	.002669	.48145
20	.602	+3.5	+128.59	+49.68	.02499	.002068	.35861
21	.602	+2.6	+79.48	+40.57	.01545	.001689	.21340
22	.602	-.0	-3.44	+32.35	-.00067	.001345	.00241
23	0.000	-.0	-.00	+0.00	0.00000	0.000000	0.00000
24	0.000	-.0	+7.22	+144.14	0.00000	0.000000	0.00000
25	0.000	-.0	+1188.75	+307.34	0.00000	0.000000	0.00000
26	0.000	-.0	+.01	+.77	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0005229 +1.94229(Ct)^1.5 -360.638(Ct)^3

STANDARD DEVIATION = 2.42061E-16
MEAN ERROR = -6.25000E-17

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-1.54	+1.81	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.40	+259.21	0.00000	0.000000	0.00000
3	0.000	+0.0	+.26	+.02	0.00000	0.000000	0.00000
4	0.000	+0.0	-.01	+.01	0.00000	0.000000	0.00000
5	.601	+.6	+5.99	+2.24	.00882	.003437	.00822
6	.601	+1.2	+6.89	+1.99	.01014	.003052	.11134
7	.601	+.3	+6.73	+2.23	.00991	.003419	.09598
8	.601	+2.4	+10.61	+2.59	.01562	.003986	.16291
9	.601	+2.8	+12.35	+2.89	.01819	.004438	.18388
10	.601	+3.9	+16.94	+3.75	.02494	.005757	.22759
11	.601	+4.5	+18.98	+3.97	.02794	.006098	.25486
12	.601	+5.8	+24.47	+5.40	.03603	.008295	.27430
13	.601	+8.3	+32.58	+7.02	0.00000	0.000000	0.00000
14	.601	+8.3	+30.94	+6.85	0.00000	0.000000	0.00000
15	.601	+6.8	+31.40	+6.27	.04624	.009630	.34353
16	.601	+5.1	+23.55	+4.65	.03468	.007151	.30851
17	.601	+3.5	+17.22	+3.77	.02535	.005798	.23158
18	.601	+1.7	+13.07	+3.26	.01925	.005015	.17717
19	.601	+.2	+10.70	+2.50	.01575	.003843	.17115
20	.601	+1.2	+8.65	+2.18	.01274	.003356	.14251
21	.601	+1.9	+7.21	+2.15	.01061	.003302	.11813
22	.601	+3.0	+4.89	+1.95	.00720	.002996	.06797
23	0.000	+3.0	+.01	+.01	0.00000	0.000000	0.00000
24	0.000	+3.0	-1.69	+1.90	0.00000	0.000000	0.00000
25	0.000	+3.0	-564.40	+259.15	0.00000	0.000000	0.00000
26	0.000	+3.0	+.06	+.02	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 140 DATE :4 APRIL 1983 12:58 OAT= 54.5 BAROMETER= 29.878 WET BULB TEM
P= 49 DRY BULB TEMP= 54.5
WIND CONDITIONS :LIGHT 0 to 3 kts $ Z/R= 3
SUMMARY:S-76 w/ 60% TAPER/ TRACTOR TAIL ROTOR

CONFIGURATION FILE : DATA10 S76[[[]WEXT/wTail/New Torque
DATA FILE : TIP:40:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 56.04 in. = 4.67 ft.
  CHORD : 3.099996 in. = .258333 ft.
  SOLIDITY : .0704325

TAIL BLADE PROPERTIES :
  RADIUS : 11.499996 in. = .958333 ft.
  CHORD : 2.000004 in. = .166667 ft.
  SOLIDITY : .221433

PROCESSING DATE :3 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000959 +.69807(Ct)^1.5 +469.820(Ct)^3

STANDARD DEVIATION = 4.44706E-15
MEAN ERROR = 1.11176E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+7.24	+143.88	0.00000	0.000000	0.00000
2	0.000	+0.0	+1188.24	+307.18	0.00000	0.000000	0.00000
3	0.000	+0.0	+.01	+1.18	0.00000	0.000000	0.00000
4	0.000	+0.0	+.01	+.26	0.00000	0.000000	0.00000
5	.650	+.0	-7.77	+38.61	-.00129	.001376	.00635
6	.651	+2.1	+68.90	+42.83	.01012	.001523	.12533
7	.650	+3.1	+110.65	+52.11	.01839	.001855	.25238
8	.651	+4.1	+171.85	+65.78	.02853	.002339	.38671
9	.651	+5.0	+239.58	+84.75	.03973	.003009	.49382
10	.650	+6.0	+328.34	+114.97	.05460	.004094	.59482
11	.651	+7.1	+408.27	+151.87	.06773	.005394	.61312
12	0.000	+7.1	+6.31	+143.88	0.00000	0.000000	0.00000
13	.648	+8.1	+478.88	+189.65	.08014	.006796	.62647
14	.649	+8.1	+482.20	+191.78	.08051	.006856	.62522
15	.650	+9.0	+542.37	+231.34	0.00000	0.000000	0.00000
16	.650	+8.5	+523.43	+213.90	.08708	.007620	.63284
17	.651	+7.5	+452.96	+172.35	.07515	.006123	.63139
18	.651	+6.5	+370.82	+132.98	.06154	.004725	.60621
19	.650	+5.6	+303.64	+103.89	.05048	.003699	.57551
20	.651	+4.5	+217.29	+76.82	.03609	.002732	.47087
21	.651	+3.5	+143.66	+58.21	.02386	.002070	.33409
22	.651	+2.5	+87.05	+47.33	.01445	.001682	.19378
23	.651	+.0	-4.26	+38.55	-.00071	.001370	.00258
24	0.000	+.0	-.01	+.26	0.00000	0.000000	0.00000
25	0.000	+.0	+7.24	+144.31	0.00000	0.000000	0.00000
26	0.000	+.0	+1188.74	+307.99	0.00000	0.000000	0.00000
27	0.000	+.0	-.00	+.43	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0003518 +2.81675(Ct)^1.5 -13.052(Ct)^3

STANDARD DEVIATION = 1.60843E-12
MEAN ERROR = -3.28330E-13

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	.650	+0.0	-2.16	+1.85	-.00271	.002432	.01934
2	.650	+0.0	-564.42	+259.34	-.70957	.340284	.58460
3	.650	+0.0	+.24	+.15	.00031	.000191	.00929
4	.650	+0.0	-.01	+.00	-.00001	.000003	.00541
5	.650	+5.5	+5.14	+2.22	.00647	.002909	.05948
6	.650	+6.8	+9.23	+2.32	.01161	.003041	.13682
7	.650	+7.2	+9.43	+2.61	.01185	.003422	.12551
8	.650	+7.1	+13.12	+3.38	.01649	.004435	.15886
9	.650	+8.6	+16.32	+3.56	.02052	.004667	.20952
10	.650	+8.4	+18.94	+3.96	.02381	.005190	.23561
11	.650	+11.1	+27.03	+5.69	.03397	.007457	.27940
12	.650	+11.1	-2.00	+1.85	0.00000	0.000000	0.00000
13	.650	+12.9	+35.05	+7.71	.04406	.010117	.30413
14	.650	+13.3	+34.20	+7.58	.04299	.009938	.29845
15	.650	+14.3	+41.56	+9.61	0.00000	0.000000	0.00000
16	.650	+13.6	+34.60	+7.58	.04349	.009939	.30360
17	.650	+12.4	+33.92	+7.33	.04264	.009611	.30479
18	.650	+8.7	+22.91	+4.44	.02879	.005823	.27922
19	.650	+7.8	+15.82	+3.40	.01988	.004455	.20936
20	.650	+7.4	+12.46	+3.25	.01566	.004269	.15280
21	.650	+3.7	+10.26	+2.81	.01290	.003686	.13218
22	.650	+2.6	+7.68	+2.22	.00965	.002907	.10852
23	.650	+4.9	+4.38	+2.12	.00551	.002775	.04906
24	.650	+0.0	+.01	+.00	.00001	.000003	.00541
25	.650	+0.0	-1.69	+1.83	-.00213	.002395	.01365
26	.650	+0.0	-564.42	+259.32	-.70956	.340179	.58463
27	.650	+0.0	+.26	+.00	.00033	.000005	.37440

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 141 DATE :4 APRIL 1983 OAT= 53 BAROMETER= 29.925 WET BULB TEMP= 48 DR
Y BULB TEMP= 53
WIND CONDITIONS :ZERO Z/R= 3
SUMMARY:S-76 W/ 60% TAPER/ TRACTOR TAIL ROTOR/REPEAT OF 140/REPAIR TO #2 BLADE C
OMPLETED

CONFIGURATION FILE : DATA10 S76CIIIWEXT/wTail/New Torque
DATA FILE : TIP141:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.699996 in. = .258333 ft.
SOLIDITY : .0784325

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :3 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000913 +.71937(Ct)^1.5 +437.424(Ct)^3

STANDARD DEVIATION = 1.14998E-15
MEAN ERROR = -2.57143E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+7.22	+144.09	0.00000	0.000000	0.00000
2	0.000	+0.0	+1187.55	+306.94	0.00000	0.000000	0.00000
3	0.000	+0.0	-.68	+1.41	0.00000	0.000000	0.00000
4	0.000	+0.0	+0.00	+.19	0.00000	0.000000	0.00000
5	.650	+.0	-4.73	+37.26	-.00079	.001325	.00312
6	.651	+.0	-6.43	+37.01	-.00107	.001313	.00497
7	.651	+2.0	+64.52	+41.94	.01068	.001486	.13932
8	.651	+2.9	+102.03	+49.42	.01691	.001754	.23529
9	.651	+4.0	+170.36	+64.09	.02824	.002275	.39144
10	.650	+5.0	+245.56	+85.35	.04075	.003033	.50904
11	.650	+6.0	+327.91	+114.77	.05441	.004078	.58407
12	.650	+7.0	+414.08	+152.26	.06875	.005413	.62490
13	.649	+8.1	+488.06	+194.17	.08128	.006924	.62803
14	.650	+8.5	+520.38	+214.84	0.00000	0.000000	0.00000
15	.650	+7.5	+451.86	+172.14	.07511	.006127	.63045
16	.650	+7.0	+417.35	+154.04	.06933	.005480	.62518
17	.651	+6.5	+377.03	+135.76	.06248	.004818	.60835
18	.650	+6.0	+340.30	+119.45	.05645	.004243	.59322
19	.650	+5.5	+297.28	+102.51	.04934	.003643	.56451
20	.651	+5.0	+257.01	+88.22	.04255	.003128	.52664
21	.651	+4.4	+216.11	+75.76	.03581	.002688	.47309
22	.650	+3.5	+141.71	+57.28	.02352	.002036	.33253
23	.650	+2.5	+84.19	+45.65	.01397	.001622	.19103
24	.650	+1.5	+47.48	+38.96	.00788	.001384	.09481
25	.651	+1.0	+31.71	+37.58	.00526	.001334	.05362
26	.651	+.0	-2.39	+36.61	-.00040	.001299	.00114
27	0.000	+.0	+0.00	+.19	0.00000	0.000000	0.00000
28	0.000	+.0	+7.22	+144.40	0.00000	0.000000	0.00000
29	0.000	+.0	+1187.56	+308.14	0.00000	0.000000	0.00000
30	0.000	+.0	+0.00	+.44	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0004775 +1.96066(Ct)^1.5 -195.040(Ct)^3

STANDARD DEVIATION = 1.06479E-15
MEAN ERROR = -2.38095E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-1.76	+1.91	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.40	+258.82	0.00000	0.000000	0.00000
3	0.000	+0.0	+.27	+.37	0.00000	0.000000	0.00000
4	0.000	+0.0	-.00	+.02	0.00000	0.000000	0.00000
5	.650	+0.0	+.34	+1.21	.00043	.001508	.00188
6	.650	+0.6	+6.99	+2.33	.00877	.003044	.00973
7	.650	+0.6	+7.46	+2.29	.00936	.003003	.10036
8	.650	+9.2	+7.93	+2.32	.00995	.003040	.10861
9	.650	+10.2	+11.44	+2.53	.01434	.003310	.17269
10	.650	+11.2	+15.17	+3.47	.01903	.004541	.19232
11	.650	+12.5	+20.19	+4.43	.02533	.005799	.23127
12	.650	+14.0	+25.49	+5.41	.03197	.007075	.26886
13	.650	+15.8	+32.92	+6.94	.04130	.009078	.30760
14	.650	+16.8	+37.63	+8.35	0.00000	0.000000	0.00000
15	.650	+15.3	+30.33	+6.76	.03804	.008854	.27879
16	.650	+14.6	+27.29	+5.72	.03423	.007490	.29127
17	.650	+14.1	+25.73	+5.54	.03228	.007250	.26612
18	.650	+10.8	+22.28	+4.44	.02795	.005813	.26745
19	.650	+12.2	+18.32	+4.27	.02299	.005589	.20746
20	.650	+10.2	+16.27	+3.43	.02041	.004489	.21616
21	.650	+7.6	+13.60	+3.30	.01706	.004319	.17165
22	.650	+6.1	+9.31	+3.09	.01168	.004043	.10387
23	.650	+6.1	+9.66	+2.21	.01212	.002893	.15350
24	.650	+4.8	+6.23	+2.27	.00782	.002972	.07738
25	.650	+5.3	+5.39	+2.24	.00676	.002938	.06293
26	.650	+5.4	+5.65	+2.16	.00709	.002829	.07020
27	0.000	+.2	+.00	+.02	0.00000	0.000000	0.00000
28	0.000	+.2	-1.93	+1.88	0.00000	0.000000	0.00000
29	0.000	+.2	-564.86	+259.32	0.00000	0.000000	0.00000
30	0.000	+.2	+.00	+.02	0.00000	0.000000	0.00000

RUN # : 142 DATE :4 APRIL 1983 19:47 OAT= 51 BAROMETER= 29.975 WET BULB TEMP= 48 DRY BULB TEMP= 51
WIND CONDITIONS :ZERO Z/R= 1.2
SUMMARY:S-76 w/ 60% TAPER. TRACTOR TAIL ROTOR

CONFIGURATION FILE : DATA10 S76[[[]WEKT/WTail/New Torque
DATA FILE : TIP142:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.099996 in. = .258333 ft.
SOLIDITY : .0704325

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :3 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000903 +.69694(Ct)^1.5 +277.056(Ct)^3

STANDARD DEVIATION = 1.67854E-15
MEAN ERROR = 3.50000E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+7.58	+143.98	0.00000	0.000000	0.00000
2	0.000	+0.0	+1187.90	+387.20	0.00000	0.000000	0.00000
3	0.000	+0.0	-.33	+1.19	0.00000	0.000000	0.00000
4	0.000	+0.0	-.33	+.20	0.00000	0.000000	0.00000
5	.600	-.1	-3.34	+30.94	-.00065	.001293	.00241
6	.600	-.1	-4.02	+30.74	-.00078	.001285	.00321
7	.600	+2.0	+56.93	+35.62	.01109	.001485	.14749
8	.600	+2.9	+94.53	+42.46	.01843	.001773	.26485
9	.600	+3.9	+150.37	+54.87	.02928	.002255	.41709
10	.600	+5.0	+217.34	+72.48	.04237	.003026	.54099
11	.600	+6.0	+284.25	+94.81	.05542	.003958	.61851
12	.600	+7.0	+352.49	+121.50	.06865	.005067	.66618
13	.600	+8.1	+427.86	+156.41	.08344	.006532	.69248
14	.599	+8.9	+476.66	+183.67	.09330	.007698	.69472
15	.599	+9.4	+510.65	+205.36	0.00000	0.000000	0.00000
16	.480	+8.9	+477.58	+185.23	0.00000	0.000000	0.00000
17	.600	+8.4	+452.34	+169.35	.08831	.007080	.69562
18	.600	+7.9	+417.36	+151.55	.08145	.006333	.68877
19	.600	+7.4	+387.59	+136.39	.07562	.005698	.68488
20	.600	+7.0	+362.99	+124.24	.07073	.005183	.68096
21	.600	+6.4	+320.68	+108.28	.06250	.004516	.64919
22	.600	+5.9	+298.56	+96.31	.05662	.004019	.62913
23	.600	+5.4	+255.32	+83.98	.04972	.003502	.59414
24	.600	+5.0	+227.05	+74.74	.04427	.003120	.56011
25	.600	+4.5	+193.96	+65.31	.03778	.002724	.50591
26	.600	+3.9	+161.65	+56.52	.03147	.002356	.44468
27	.601	+3.4	+131.25	+49.73	.02555	.002073	.36965
28	.600	+2.4	+81.52	+39.57	.01588	.001650	.22750
29	.600	+1.4	+42.28	+33.19	.00823	.001384	.10128
30	.600	+.0	+2.86	+30.84	.00056	.001288	.00192
31	0.000	+.0	+.33	+.20	0.00000	0.000000	0.00000
32	0.000	+.0	+7.58	+144.38	0.00000	0.000000	0.00000
33	0.000	+.0	+1191.45	+388.81	0.00000	0.000000	0.00000
34	0.000	+.0	+.33	+.41	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0005095 +1.71892(Ct)^1.9 +50.398(Ct)^3

STANDARD DEVIATION = 6.54504E-14
MEAN ERROR = -1.33600E-14

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-2.09	+1.96	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.67	+259.23	0.00000	0.000000	0.00000
3	0.000	+0.0	-.00	+.09	0.00000	0.000000	0.00000
4	0.000	+0.0	-.00	+.06	0.00000	0.000000	0.00000
5	.600	+.8	+.78	+1.16	.00115	.001788	.00722
6	.600	+6.3	+6.76	+2.21	.00997	.003395	.09752
7	.600	+6.3	+7.78	+2.14	.01147	.003288	.12439
8	.600	+6.8	+7.79	+2.27	.01148	.003488	.11734
9	.600	+7.3	+9.14	+2.30	.01348	.003536	.14723
10	.600	+8.4	+13.65	+3.01	.02013	.004626	.20534
11	.600	+9.6	+16.87	+3.50	.02487	.005389	.24216
12	.600	+10.4	+19.61	+4.21	.02891	.006472	.25276
13	.600	+12.7	+27.28	+5.79	.04023	.008914	.30118
14	.600	+13.7	+31.59	+6.83	.04659	.010514	.31822
15	.600	+14.2	+35.01	+8.00	0.00000	0.000000	0.00000
16	.600	+13.9	+34.07	+7.69	.05024	.011828	.31679
17	.600	+13.2	+29.65	+6.51	.04372	.010012	.30379
18	.600	+13.0	+29.13	+6.48	.04295	.009972	.29705
19	.600	+11.8	+25.17	+5.28	.03711	.008124	.29277
20	.600	+10.7	+20.72	+4.26	.03055	.006547	.27138
21	.600	+9.8	+19.60	+4.38	.02890	.006738	.24263
22	.600	+8.4	+18.33	+3.72	.02703	.005722	.25838
23	.600	+6.1	+16.34	+3.41	.02409	.005244	.23723
24	.600	+5.0	+13.04	+2.94	.01922	.004529	.19582
25	.600	+4.6	+11.98	+2.76	.01755	.004240	.18241
26	.600	+3.7	+9.00	+2.15	.01327	.003311	.15358
27	.600	+3.7	+9.35	+2.26	.01379	.003473	.15585
28	.600	+2.7	+5.27	+2.07	.00776	.003190	.07137
29	.600	+2.7	+5.51	+1.71	.00812	.002626	.09275
30	.600	+2.8	+5.16	+2.17	.00761	.003333	.05625
31	0.000	+0.0	+.00	+.06	0.00000	0.000000	0.00000
32	0.000	+0.0	-2.70	+1.96	0.00000	0.000000	0.00000
33	0.000	+0.0	-564.65	+259.30	0.00000	0.000000	0.00000
34	0.000	+0.0	+.00	+.03	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 149 DATE :4 APRIL 1983 20:27 OAT= 52 BAROMETER= 29.87 WET BULB TEMP= 46 DRY BULB TEMP= 52
WIND CONDITIONS :ZERO Z/R= .75
SUMMARY:8-76 W/ 80% TAPER/ TRACTOR TAIL ROTOR

CONFIGURATION FILE : DATA10 876[[[]WEKT/WTail/New Torque
DATA FILE : TIP143:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 56.04 in. = 4.67 ft.
  CHORD : 3.899996 in. = .258333 ft.
  SOLIDITY : .0704325

TAIL BLADE PROPERTIES :
  RADIUS : 11.499996 in. = .958333 ft.
  CHORD : 2.000004 in. = .166667 ft.
  SOLIDITY : .221433

PROCESSING DATE :3 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000902 +.66086(Ct)^1.5 +240.545(Ct)^3

STANDARD DEVIATION = 1.42682E-15
MEAN ERROR = 3.19048E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+7.89	+143.82	0.00000	0.000000	0.00000
2	0.000	+0.0	+1188.89	+307.50	0.00000	0.000000	0.00000
3	0.000	+0.0	+.66	+.85	0.00000	0.000000	0.00000
4	0.000	+0.0	-.00	+0.00	0.00000	0.000000	0.00000
5	.600	-.1	-5.38	+31.46	-.00105	.001311	.00485
6	.601	-.1	-4.54	+31.48	-.00088	.001311	.00375
7	.601	+1.0	+28.50	+31.92	.00554	.001330	.05826
8	.600	+2.0	+62.93	+35.98	.01224	.001499	.16964
9	.600	+3.0	+103.26	+43.53	.02014	.001818	.29497
10	.601	+4.0	+164.40	+56.66	.03195	.002358	.45451
11	.601	+4.9	+225.29	+73.13	.04377	.003043	.56469
12	.601	+6.0	+302.04	+97.09	.05869	.004040	.66048
13	.601	+7.0	+373.37	+124.09	.07258	.005166	.71037
14	.601	+7.9	+433.75	+151.30	.08438	.006303	.72983
15	.601	+9.0	+497.58	+185.01	0.00000	0.000000	0.00000
16	.600	+9.5	+523.85	+201.21	0.00000	0.000000	0.00000
17	.600	+8.9	+497.72	+184.66	.09708	.007721	.73516
18	.600	+8.4	+469.41	+166.94	.09144	.007047	.73634
19	.600	+7.9	+438.75	+152.31	.08537	.006346	.73759
20	.601	+7.4	+402.39	+135.88	.07828	.005661	.72609
21	.600	+6.9	+372.29	+123.18	.07262	.005146	.71379
22	.600	+6.5	+342.11	+110.48	0.00000	0.000000	0.00000
23	.600	+5.5	+273.18	+86.48	.05322	.003608	.63868
24	.600	+4.4	+208.96	+64.80	.03913	.002703	.53732
25	.601	+3.5	+148.93	+50.12	.02742	.002088	.40804
26	.600	+2.4	+82.45	+39.22	.01606	.001636	.23349
27	.600	+1.4	+47.71	+33.08	.00930	.001380	.12188
28	.600	-.1	-1.81	+30.55	-.00035	.001274	.00097
29	0.000	-.1	+.00	+0.00	0.00000	0.000000	0.00000
30	0.000	-.1	+7.89	+143.86	0.00000	0.000000	0.00000
31	0.000	-.1	+1188.88	+307.50	0.00000	0.000000	0.00000
32	0.000	-.1	+.00	+.87	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0004771 +1.90020(Ct)^1.5 +26.305(Ct)^3 .

STANDARD DEVIATION = 3.04116E-14
MEAN ERROR = -6.63636E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-2.54	+1.96	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.67	+259.19	0.00000	0.000000	0.00000
3	0.000	+0.0	+0.00	+0.00	0.00000	0.000000	0.00000
4	0.000	+0.0	+0.00	+0.00	0.00000	0.000000	0.00000
5	.600	+.8	+.69	+1.15	.00101	.001799	.00606
6	.600	+3.1	+4.55	+1.93	.00670	.002960	.06162
7	.600	+3.6	+5.68	+1.56	.00836	.002389	.10641
8	.600	+6.6	+5.24	+2.08	.00771	.003199	.07041
9	.600	+7.4	+7.20	+2.29	.01059	.003517	.10316
10	.600	+8.5	+10.43	+2.42	.01535	.003716	.17031
11	.600	+9.0	+13.41	+3.12	.01974	.004798	.19236
12	.600	+10.6	+16.87	+3.59	.02483	.005513	.23618
13	.600	+11.8	+21.49	+4.69	.03163	.007197	.26004
14	.600	+13.2	+27.26	+5.81	.04012	.008924	.29961
15	.600	+14.8	+33.24	+7.94	0.00000	0.000000	0.00000
16	.600	+15.1	+34.88	+7.96	0.00000	0.000000	0.00000
17	.600	+14.3	+31.36	+7.16	.04615	.011002	.29983
18	.600	+14.4	+32.42	+7.71	.04772	.011841	.29293
19	.600	+13.3	+27.70	+6.42	.04077	.009867	.27766
20	.600	+12.0	+24.16	+5.48	.03556	.008412	.26525
21	.600	+11.5	+21.43	+4.63	.03153	.007110	.26206
22	.600	+11.1	+19.66	+4.25	.02894	.006528	.25091
23	.600	+6.9	+15.41	+3.39	.02268	.005202	.21852
24	.600	+5.7	+12.68	+3.04	.01854	.004676	.17967
25	.600	+7.7	+9.11	+2.32	.01341	.003569	.14473
26	.600	+3.5	+6.39	+1.97	.00941	.003025	.10035
27	.600	+3.1	+5.26	+1.61	.00775	.002476	.09167
28	.600	+3.1	+4.96	+1.76	.00730	.002703	.07685
29	0.000	+.1	+0.00	+0.00	0.00000	0.000000	0.00000
30	0.000	+.1	-3.14	+1.66	0.00000	0.000000	0.00000
31	0.000	+.1	-564.62	+259.19	0.00000	0.000000	0.00000
32	0.000	+.1	-.00	-+.04	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 144 DATE :5 APRIL 1983 9:03 OAT= 51 BAROMETER= 30.06 WET BULB TEMP= 44.75 DRY BULB TEMP= 51
WIND CONDITIONS :LIGHT 0 to 3 kts NW Ω/R= 3
SUMMARY:H-34 CALIBRATION RUN

CONFIGURATION FILE : DATA12 H34(III)/wTail/New Torque
DATA FILE : TIP144:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 54.24996 in. = 4.52083 ft.
  CHORD : 4.250004 in. = .354167 ft.
  SOLIDITY : .099747

TAIL BLADE PROPERTIES :
  RADIUS : 11.499996 in. = .958333 ft.
  CHORD : 2.000004 in. = .166667 ft.
  SOLIDITY : .221433

PROCESSING DATE :3 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001124 +.85996(Ct)^1.5 +82.029(Ct)^3

STANDARD DEVIATION = 4.99566E-15
MEAN ERROR = 1.04167E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+5.25	+143.73	0.00000	0.000000	0.00000
2	0.000	+0.0	+1188.20	+306.83	0.00000	0.000000	0.00000
3	0.000	+0.0	-.04	+1.52	0.00000	0.000000	0.00000
4	0.000	+0.0	+.01	+.47	0.00000	0.000000	0.00000
5	.600	-.0	+1.35	+34.46	.00020	.001116	.00056
6	.599	+2.0	+40.40	+38.29	.00593	.001242	.00201
7	.600	+4.0	+131.33	+57.25	.01924	.001855	.32125
8	.600	+6.0	+245.85	+94.93	.03599	.003074	.49608
9	.599	+7.0	+311.14	+119.41	.04560	.003871	.56180
10	.599	+8.0	+373.27	+146.83	.05475	.004764	.60056
11	.599	+9.0	+436.42	+177.49	.06408	.005765	.62843
12	.599	+9.4	+473.91	+194.89	.06953	.006325	.64736
13	.599	+10.0	+500.00	+211.83	.07338	.006877	.64556
14	.599	+10.5	+536.34	+234.47	0.00000	0.000000	0.00000
15	.598	+10.2	+519.98	+223.22	.07646	.007262	.65022
16	.600	+10.0	+509.20	+215.23	.07457	.006972	.65227
17	.599	+9.7	+494.18	+207.37	.07251	.006731	.64787
18	.599	+9.3	+464.67	+192.10	.06817	.006234	.63765
19	.600	+8.5	+411.53	+164.01	.06023	.005310	.62172
20	.600	+7.5	+346.61	+133.62	.05075	.004328	.59004
21	.600	+6.5	+288.26	+108.12	.04217	.003499	.55279
22	.600	+5.5	+222.51	+84.44	.03257	.002734	.48011
23	.600	+5.0	+194.96	+75.30	.02854	.002439	.44167
24	.600	+4.5	+164.85	+66.68	.02399	.002157	.38475
25	.600	+3.5	+119.53	+54.35	.01749	.001759	.29361
26	.600	+3.0	+96.72	+48.75	.01416	.001579	.23835
27	.600	+1.5	+26.25	+36.93	.00384	.001196	.04449
28	.599	+.5	+7.72	+35.37	.00113	.001148	.00742
29	.599	-.0	+2.81	+35.15	.00041	.001140	.00164
30	0.000	-.0	-.01	+.47	0.00000	0.000000	0.00000
31	0.000	-.0	+5.25	+144.18	0.00000	0.000000	0.00000
32	0.000	-.0	+1188.21	+307.70	0.00000	0.000000	0.00000
33	0.000	-.0	-.01	+.38	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 145 DATE :5 APRIL 1983 12:37 OAT= 55 BAROMETER= 30.042 WET BULB TEMP = 46 DRY BULB TEMP= 55
WIND CONDITIONS :0-3 S/W Z/R= 3
SUMMARY:ISOLATED MAIN ROTOR/3-70w 20/35deg DOUBLE SWEEP & 20 deg Anh

CONFIGURATION FILE : DATA9 S70[[[]wEXT/wTail/New Torque
DATA FILE : TIP145:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.22396 in. = 4.68533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0815251

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :3 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001094 +.68317(Ct)^1.5 +203.817(Ct)^3

STANDARD DEVIATION = 1.01966E-15
MEAN ERROR = 2.17391E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+7.31	+143.81	0.00000	0.000000	0.00000
2	0.000	+0.0	+1187.56	+386.73	0.00000	0.000000	0.00000
3	0.000	+0.0	-.67	+1.62	0.00000	0.000000	0.00000
4	0.000	+0.0	-.00	+.41	0.00000	0.000000	0.00000
5	.600	+0.0	-3.70	+39.58	-.00062	.001487	.00220
6	.599	+2.0	+72.84	+43.93	.01216	.001566	.17297
7	.600	+4.0	+162.64	+63.03	.02711	.002242	.40188
8	.600	+5.0	+221.40	+78.06	.03693	.002779	.51560
9	.600	+6.0	+277.54	+95.94	.04631	.003417	.58884
10	.600	+7.0	+341.72	+119.70	.05695	.004258	.64446
11	.600	+8.0	+406.55	+148.14	.06784	.005276	.67619
12	.600	+9.0	+468.34	+174.45	.07751	.006202	.70249
13	.599	+9.5	+508.90	+197.97	.08516	.007070	.70962
14	.599	+10.0	+541.71	+215.14	.09045	.007667	.71636
15	.599	+10.3	+561.11	+225.71	.09368	.008043	.71975
16	.598	+10.5	+570.09	+231.16	.09555	.008269	.72113
17	.599	+11.0	+607.76	+254.49	.10177	.009096	.72068
18	.597	+11.0	+600.45	+250.28	.10118	.009001	.72188
19	.599	+10.1	+544.09	+215.61	.09083	.007682	.71943
20	.600	+8.4	+436.32	+160.54	.07282	.005718	.69378
21	.600	+7.5	+378.66	+133.60	.06306	.004749	.67330
22	.600	+6.5	+312.44	+106.74	.05206	.003796	.63176
23	.600	+5.5	+256.14	+88.73	.04268	.003156	.56415
24	.599	+4.4	+196.34	+70.32	.03277	.002505	.47813
25	.600	+3.0	+120.65	+52.78	.02013	.001880	.30678
26	.600	+.9	+45.96	+41.01	.00766	.001459	.09278
27	.600	-.0	+2.91	+39.48	.00049	.001406	.00154
28	0.000	-.0	+.00	+.41	0.00000	0.000000	0.00000
29	0.000	-.0	+7.31	+144.33	0.00000	0.000000	0.00000
30	0.000	-.0	+1188.22	+387.86	0.00000	0.000000	0.00000
31	0.000	-.0	-.00	+.55	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 146 DATE :5 APRIL 1983 17:25 OAT= 51.5 BAROMETER= 30.059 WET BULB TE
MP= 44 DRY BULB TEMP= 51.5
WIND CONDITIONS :0-3 NORTH Z/R= 3
SUMMARY:5-76 WITH 20/35deg DOUBLE SWEEP & 20 deg Anh/TRACTOR TAIL ROTOR

CONFIGURATION FILE : DATA9 $70[1]WEXT/wTail/New Torque
DATA FILE : TIP146:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 56.22396 in. = 4.68533 ft.
  CHORD : 3.6 in. = .3 ft.
  SOLIDITY : .0815251

TAIL BLADE PROPERTIES :
  RADIUS : 11.499996 in. = .958333 ft.
  CHORD : 2.000004 in. = .166667 ft.
  SOLIDITY : .221433

PROCESSING DATE :3 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001100 +.71533(Ct)^1.5 +168.993(Ct)^3

STANDARD DEVIATION = 1.19896E-15
MEAN ERROR = -2.50000E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+0.25	+144.00	0.00000	0.000000	0.00000
2	0.000	+0.0	+1188.49	+307.31	0.00000	0.000000	0.00000
3	0.000	+0.0	+.26	+1.04	0.00000	0.000000	0.00000
4	0.000	+0.0	-.25	+.25	0.00000	0.000000	0.00000
5	.550	-.0	+8.42	+33.26	.00167	.001487	.00978
6	.550	-.0	+16.77	+34.07	.00332	.001440	.02684
7	.551	+2.0	+65.48	+38.75	.01294	.001634	.18182
8	.550	+3.0	+97.39	+44.77	.01928	.001892	.28577
9	.550	+4.1	+141.38	+54.25	.02798	.002291	.41239
10	.551	+5.0	+187.18	+66.53	.03700	.002807	.51199
11	.550	+6.0	+236.13	+82.43	.04673	.003481	.58575
12	.550	+7.1	+289.78	+102.39	.05732	.004324	.64078
13	.549	+8.0	+337.19	+123.03	.06697	.005215	.67098
14	.550	+9.0	+393.76	+150.61	.07796	.006364	.69854
15	.551	+10.1	+453.35	+179.99	.08966	.007597	.71345
16	.549	+11.0	+502.21	+209.91	.09999	.008920	.71563
17	.549	+12.0	+571.77	+252.34	0.00000	0.000000	0.00000
18	.550	+11.5	+525.24	+228.84	.10625	.009695	.72119
19	.550	+11.2	+518.31	+219.17	.10268	.009267	.71682
20	.550	+11.0	+504.63	+209.59	.09995	.008871	.71921
21	.549	+10.7	+485.74	+201.48	.09650	.008540	.70871
22	.550	+10.5	+474.57	+196.28	.09414	.008306	.70204
23	.550	+10.0	+448.10	+177.15	.08878	.007491	.71296
24	.550	+9.5	+416.80	+164.25	.08247	.006936	.68937
25	.550	+8.5	+363.10	+136.41	.07192	.005766	.67528
26	.550	+7.5	+307.93	+110.55	.06099	.004674	.65070
27	.550	+6.5	+256.27	+89.79	.05069	.003791	.60789
28	.550	+5.5	+212.94	+74.87	.04217	.003164	.55244
29	.550	-.1	+16.51	+33.81	.00327	.001429	.02642
30	0.000	-.1	+.25	+.25	0.00000	0.000000	0.00000
31	0.000	-.1	+9.25	+144.53	0.00000	0.000000	0.00000
32	0.000	-.1	+1189.17	+307.97	0.00000	0.000000	0.00000
33	0.000	-.1	+.25	+.42	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0003768 +1.59633(Ct)^1.5 +125.736(Ct)^3

STANDARD DEVIATION = 6.87472E-14
MEAN ERROR = -1.26667E-14

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-2.68	+1.99	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.67	+259.88	0.00000	0.000000	0.00000
3	0.000	+0.0	+.00	+.12	0.00000	0.000000	0.00000
4	0.000	+0.0	-.00	+.03	0.00000	0.000000	0.00000
5	.550	+1.0	+.97	+1.09	.00170	.001992	.01166
6	.550	+5.4	+5.13	+1.36	.00895	.002469	.11416
7	.550	+6.5	+8.79	+1.51	.01534	.002740	.23057
8	.550	+8.5	+8.72	+2.03	.01520	.003700	.16858
9	.550	+7.3	+10.38	+1.78	.01810	.003244	.24985
10	.550	+8.1	+12.18	+2.21	.02125	.004013	.25680
11	.550	+8.9	+14.71	+2.52	.02565	.004577	.29870
12	.550	+9.8	+16.87	+3.27	.02941	.005953	.28194
13	.550	+10.9	+21.81	+4.07	.03804	.007415	.33298
14	.550	+11.8	+23.99	+4.69	.04184	.008540	.33351
15	.550	+13.6	+31.60	+6.78	.05510	.012333	.34896
16	.550	+14.6	+37.52	+8.48	.06543	.015427	.36095
17	.550	+16.6	+42.85	+10.74	0.00000	0.000000	0.00000
18	.550	+15.8	+39.28	+9.49	.06837	.017276	.34430
19	.550	+15.5	+36.83	+8.72	.06423	.015861	.34147
20	.550	+15.1	+35.97	+8.29	.06273	.015092	.34642
21	.550	+14.7	+34.66	+7.73	.06048	.014064	.35190
22	.550	+14.7	+34.93	+7.86	.06092	.014337	.34894
23	.550	+13.6	+30.00	+6.52	.05231	.011873	.33529
24	.550	+13.7	+27.09	+5.71	.04724	.010392	.32874
25	.550	+13.8	+22.87	+4.75	.03989	.008635	.30701
26	.550	+10.5	+19.98	+3.63	.03471	.006603	.32579
27	.550	+8.6	+15.67	+2.48	.02733	.004514	.33292
28	.550	+6.3	+11.28	+2.27	.01967	.004133	.22215
29	.550	+3.3	+6.23	+1.36	.01087	.002462	.15192
30	0.000	+0.0	+.00	+.03	0.00000	0.000000	0.00000
31	0.000	+0.0	-2.83	+1.88	0.00000	0.000000	0.00000
32	0.000	+0.0	-564.40	+259.19	0.00000	0.000000	0.00000
33	0.000	+0.0	+.00	+.01	0.00000	0.000000	0.00000

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EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 147   DATE 15 APRIL 1983 13:15 OAT= 52 BAROMETER= 30.055 WET BULB TEMP = 44 DRY BULB TEMP= 52
WIND CONDITIONS 10-3 NORTH   Z/R= 1
SUMMARY:S-70 WITH 20/35deg DOUBLE SWEEP & 20 deg Anh/TRACTOR TAIL ROTOR

CONFIGURATION FILE : DATA9   STOC111]WEXT/WTail/New Torque
DATA FILE : TIP147:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 55.22396 in. = 4.60533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0815251

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE 13 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

************MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001124 +.68968(Ct)^1.5 +199.938(Ct)^3

STANDARD DEVIATION = 4.16598E-15
MEAN ERROR = 9.09091E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+9.25	+144.19	0.00000	0.000000	0.00000
2	0.000	+0.0	+1187.97	+307.63	0.00000	0.000000	0.00000
3	0.000	+0.0	-.27	+.72	0.00000	0.000000	0.00000
4	0.000	+0.0	+.01	+.25	0.00000	0.000000	0.00000
5	.600	+0.0	+13.46	+41.01	.00224	.001457	.01470
6	.600	+0.0	+12.97	+41.11	.00216	.001460	.01386
7	.601	+2.3	+80.89	+46.98	.01343	.001665	.18877
8	.601	+3.1	+115.37	+53.16	.01910	.001886	.28429
9	.601	+4.1	+160.23	+63.73	.02663	.002261	.38810
10	.601	+5.1	+218.82	+79.13	.03628	.002800	.49825
11	.600	+6.2	+285.61	+99.85	.04751	.003545	.58980
12	.600	+7.1	+340.75	+121.20	.05674	.004307	.63351
13	.600	+8.1	+400.82	+147.09	.06669	.005224	.65571
14	.600	+9.1	+476.75	+179.68	.07931	.006380	.70686
15	.600	+9.1	+473.66	+180.69	.07894	.006427	.69673
16	.599	+9.1	+466.89	+176.96	.07789	.006302	.69639
17	.600	+9.2	+483.08	+184.40	.08042	.006552	.70279
18	.600	+8.6	+439.50	+162.56	.07308	.005769	.69134
19	.600	+7.6	+373.53	+133.27	.06213	.004731	.66085
20	.600	+6.6	+303.69	+108.09	.05055	.003837	.59795
21	.601	+5.5	+247.80	+87.55	.04119	.003106	.54336
22	.601	+4.6	+194.12	+71.82	.03226	.002547	.43927
23	.600	+3.6	+142.88	+58.57	.02378	.002081	.35590
24	.600	+2.6	+94.65	+46.64	.01575	.001728	.23099
25	.600	+1.6	+60.36	+42.71	.01006	.001520	.13410
26	.599	+.1	+17.48	+40.70	.00292	.001450	.02195
27	0.000	+.1	-.01	+.25	0.00000	0.000000	0.00000
28	0.000	+.1	+9.25	+143.99	0.00000	0.000000	0.00000
29	0.000	+.1	+1187.95	+307.51	0.00000	0.000000	0.00000
30	0.000	+.1	-.01	+.80	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0003472 +2.55937(Ct/σ)^1.5 +309.945(Ct/σ)^3

STANDARD DEVIATION = 7.29046E-15
MEAN ERROR = 1.59091E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-2.67	+1.93	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.67	+2[illegible].14	0.00000	0.000000	0.00000
3	0.000	+0.0	-.00	+.06	0.00000	0.000000	0.00000
4	0.000	+0.0	-.00	+.06	0.00000	0.000000	0.00000
5	.600	+3.2	+5.05	+1.40	.00739	.002138	.09897
6	.600	+6.0	+8.36	+2.25	.01224	.003445	.13082
7	.600	+6.0	+8.84	+1.70	.01294	.002601	.18836
8	.600	+5.8	+8.68	+2.26	.01271	.003449	.13828
9	.600	+7.6	+12.98	+3.34	.01843	.005100	.16319
10	.600	+8.4	+14.43	+3.48	.02113	.005314	.19224
11	.600	+9.2	+16.79	+4.11	.02458	.006274	.20442
12	.600	+11.1	+21.75	+5.66	.03185	.008647	.21875
13	.600	+11.8	+24.22	+6.51	.03546	.009950	.22334
14	.600	+14.4	+29.24	+8.68	.04282	.013258	.22237
15	.600	+14.9	+30.78	+9.39	.04507	.014348	.22189
16	.600	+15.0	+31.88	+10.05	.04669	.015357	.21858
17	.600	+15.0	+30.00	+9.32	.04393	.014239	.21513
18	.600	+13.9	+27.61	+8.23	.04043	.012580	.21505
19	.600	+12.3	+23.92	+6.48	.03502	.009894	.22044
20	.600	+11.2	+20.68	+5.52	.03017	.008435	.20671
21	.600	+10.1	+15.16	+4.21	.02220	.006433	.17105
22	.600	+8.6	+13.72	+3.39	.02009	.005182	.18285
23	.600	+7.1	+9.28	+2.33	.01359	.003568	.14772
24	.600	+6.5	+7.89	+2.14	.01156	.003269	.12650
25	.600	+6.2	+8.16	+1.62	.01195	.002473	.17574
26	.600	+5.2	+7.25	+2.25	.01062	.003438	.10595
27	0.000	+0.0	+.00	+.06	0.00000	0.000000	0.00000
28	0.000	+0.0	-2.52	+1.61	0.00000	0.000000	0.00000
29	0.000	+0.0	-564.66	+259.32	0.00000	0.000000	0.00000
30	0.000	+0.0	+.00	+.09	0.00000	0.000000	0.00000

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EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 148 DATE :6 APRIL 1983 14:38 OAT= 57 BAROMETER= 30.045 WET BULB TEMP = 47.5 DRY BULB TEMP= 57
WIND CONDITIONS :0-2.5 GUSTY EAST SOUTHEAST Z/R= 3
SUMMARY:ISOLATED TRACTOR TAIL ROTOR/REPEAT OF TIP110

CONFIGURATION FILE : DATA9 $70[[[]WEXT/wTail/New Torque
DATA FILE : TIP148:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.22396 in. = 4.68533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0815251

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :3 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0002861 +1.80325(Ct)^1.5 -168.297(Ct)^3

STANDARD DEVIATION = 7.99403E-14
MEAN ERROR = -1.88421E-14

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-1.00	+2.39	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.68	+258.61	0.00000	0.000000	0.00000
3	0.000	+0.0	-.01	+.58	0.00000	0.000000	0.00000
4	0.000	+0.0	-.00	+.07	0.00000	0.000000	0.00000
5	.600	+.3	+.32	+.66	.00047	.001013	.00336
6	.600	+3.6	+.97	+.66	.00142	.001006	.01769
7	.600	+5.4	+3.24	+1.16	.00475	.001769	.06159
8	.600	+7.8	+9.48	+1.42	.01391	.002167	.25187
9	.600	+9.7	+16.21	+2.46	.02376	.003675	.33168
10	.600	+11.8	+24.07	+3.59	.03530	.005486	.40223
11	.600	+13.8	+32.85	+5.37	.04817	.008215	.42821
12	.600	+15.4	+41.72	+7.58	.06118	.011593	.43434
13	.600	+17.4	+50.73	+9.93	.07439	.015198	.44418
14	.600	+17.4	+48.93	+9.57	.07174	.014637	.43686
15	.600	+16.7	+33.47	+7.26	.04908	.011102	.32592
16	.600	+14.3	+29.03	+5.85	.04257	.008955	.32640
17	.600	+12.6	+21.39	+3.87	.03137	.005922	.31213
18	.600	+10.4	+14.87	+3.05	.02180	.004664	.22969
19	.600	+8.8	+9.80	+2.12	.01436	.003250	.17630
20	.600	+6.4	+4.71	+.99	.00691	.001519	.12585
21	.600	+5.0	+1.50	+1.03	.00221	.001571	.02195
22	.600	+2.2	+.92	+1.00	.00135	.001529	.01082
23	.600	+.1	+.04	+1.01	.00005	.001542	.00009
24	0.000	-.1	+.00	+.07	0.00000	0.000000	0.00000
25	0.000	-.1	-1.75	+2.70	0.00000	0.000000	0.00000
26	0.000	-.1	-564.67	+258.33	0.00000	0.000000	0.00000
27	0.000	-.1	+.00	+.07	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 149 DATE :6 APRIL 1983 3:53P OAT= 56 BAROMETER= 30.042 WET BULB TEMP= 48 DRY BULB TEMP= 56
WIND CONDITIONS :LIGHT GUST ESE 0-3 Z/R= 3
SUMMARY:ISOLATED TRACTOR TAIL ROTOR/REPEAT OF TIP110 AND TIP148 [After Repair]

CONFIGURATION FILE : DATA9 S70[111]WEXT/wTail/New Torque
DATA FILE : TIP149:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.22396 in. = 4.68533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0819251

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :3 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0002693 +1.51293(Ct)^1.5 -97.178(Ct)^3

STANDARD DEVIATION = 6.89875E-14
MEAN ERROR = -1.78125E-14

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.600	+0.0	-1.74	+2.19	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.67	+258.62	0.00000	0.000000	0.00000
3	0.000	+0.0	+.00	+.57	0.00000	0.000000	0.00000
4	0.000	+0.0	-.00	+.00	0.00000	0.000000	0.00000
5	.600	+.4	+.33	+.46	.00048	.000707	.00491
6	.600	+2.6	+.95	+.65	.00139	.000998	.01750
7	.600	+4.3	+2.93	+1.25	.00430	.001917	.04894
8	.600	+6.5	+7.71	+1.40	.01131	.002136	.18734
9	.600	+8.5	+15.06	+2.55	.02209	.003904	.27994
10	.600	+10.5	+23.93	+3.75	.03510	.005737	.38138
11	.600	+12.2	+31.53	+4.89	.04624	.007481	.44224
12	.600	+14.4	+41.97	+7.37	.06156	.011284	.45039
13	.600	+13.3	+37.95	+6.17	.05566	.009443	.46274
14	.600	+11.2	+28.44	+4.64	.04171	.007101	.39913
15	.600	+9.1	+20.03	+2.94	.02938	.004501	.37226
16	.600	+7.3	+15.00	+2.30	.02201	.003513	.30925
17	.600	+5.2	+8.27	+1.50	.01213	.002301	.19323
18	.600	+2.7	+2.92	+1.19	.00428	.001826	.05094
19	.600	+.7	+1.32	+.67	.00193	.001027	.02749
20	.600	+.5	+.44	+.56	.00065	.001014	.00542
21	0.000	+0.0	+.00	+.00	0.00000	0.000000	0.00000
22	0.000	+0.0	-2.21	+2.07	0.00000	0.000000	0.00000
23	0.000	+0.0	-564.67	+258.62	0.00000	0.000000	0.00000
24	0.000	+0.0	-.00	+.00	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 150 DATE :6 APRIL 1983 4:45P OAT= 57 BAROMETER= 30.041 WET BULB TEMP= 48 DRY BULB TEMP= 57
WIND CONDITIONS :0-2 EAST Z/R= 3
SUMMARY:S-70 WITH 20/35deg SWEEP AND 20 deg ANHEDRAL / TRACTOR TAIL ROTOR

CONFIGURATION FILE : DATA9 $70[111WEXT/WTail/New Torque
DATA FILE : TIP150:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.22396 in. = 4.68533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0819251

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :3 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001103 +.70716(Ct)^1.5 +173.572(Ct)^3

STANDARD DEVIATION = 4.07862E-16
MEAN ERROR = 8.69565E-17

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+7.71	+144.27	0.00000	0.000000	0.00000
2	0.000	+0.0	+1187.94	+307.38	0.00000	0.000000	0.00000
3	0.000	+0.0	-.29	+1.09	0.00000	0.000000	0.00000
4	0.000	+0.0	+.24	+.02	0.00000	0.000000	0.00000
5	.552	+0.0	+9.83	+33.55	.00194	.001413	.81220
6	.551	-.0	+17.61	+34.36	.00348	.001448	.82860
7	.552	+2.0	+61.85	+38.44	.01220	.001618	.16811
8	.551	+3.0	+95.97	+44.68	.01896	.001880	.28027
9	.552	+4.0	+136.06	+53.82	.02683	.002265	.39177
10	.552	+4.9	+181.62	+65.85	.03575	.002767	.49331
11	.552	+6.0	+232.86	+81.11	.04582	.003406	.58130
12	.552	+7.0	+282.68	+100.10	.05571	.004212	.63039
13	.552	+8.0	+336.69	+123.74	.06640	.005209	.66323
14	.551	+8.9	+388.51	+146.96	.07671	.006194	.69263
15	.551	+10.0	+449.12	+178.15	.08874	.007513	.71842
16	.551	+11.2	+513.39	+215.10	.10147	.009074	.71918
17	.551	+11.7	+540.88	+233.32	0.00000	0.000000	0.00000
18	.552	+10.5	+476.37	+191.92	.09395	.008079	.71960
19	.552	+9.5	+418.43	+161.53	.08236	.006785	.70322
20	.552	+8.4	+364.69	+135.25	.07182	.005685	.68314
21	.552	+7.4	+309.78	+110.41	.06098	.004633	.65500
22	.552	+6.4	+252.49	+89.48	.04979	.003766	.59562
23	.551	+5.5	+214.83	+74.56	.04248	.003141	.56119
24	.551	+4.5	+165.15	+60.89	.03262	.002567	.46338
25	.551	+3.5	+120.67	+49.10	.02381	.002068	.35876
26	.552	+2.5	+84.06	+41.60	.01657	.001750	.24605
27	.552	+1.5	+55.16	+37.10	.01088	.001561	.14668
28	.552	-.1	+13.73	+33.86	.00270	.001423	.01995
29	0.000	-.1	-.24	+.02	0.00000	0.000000	0.00000
30	0.000	-.1	+5.75	+144.35	0.00000	0.000000	0.00000
31	0.000	-.1	+1187.98	+307.84	0.00000	0.000000	0.00000
32	0.000	-.1	-.24	+.57	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001584 +1.90323(Ct)^1.5 +67.639(Ct)^3

STANDARD DEVIATION = 5.30221E-15
MEAN ERROR = -1.13043E-15

Pt	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-1.89	+2.56	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.67	+259.19	0.00000	0.000000	0.00000
3	0.000	+0.0	-.00	+.00	0.00000	0.000000	0.00000
4	0.000	+0.0	+.00	+.00	0.00000	0.000000	0.00000
5	.595	+.0	-.36	+.45	-.00053	.000694	.00591
6	.595	+7.7	+6.91	+1.16	.01030	.001803	.19293
7	.595	+7.7	+8.08	+1.23	.01205	.001914	.22986
8	.595	+7.6	+8.29	+1.19	.01235	.001857	.24597
9	.595	+8.2	+8.10	+1.25	.01207	.001940	.22752
10	.595	+9.4	+11.43	+1.56	.01702	.002419	.30552
11	.595	+10.8	+14.04	+2.36	.02092	.003670	.27445
12	.595	+14.3	+18.61	+2.97	.02773	.004618	.33265
13	.595	+13.8	+23.83	+4.51	.03551	.007010	.31755
14	.595	+15.0	+27.51	+5.47	.04098	.008502	.32468
15	.595	+15.5	+29.08	+5.84	.04332	.009092	.33036
16	.595	+17.4	+35.56	+7.75	.05298	.012052	.33669
17	.595	+18.4	+39.71	+9.37	0.00000	0.000000	0.00000
18	.595	+16.6	+32.62	+6.78	.04861	.010540	.33834
19	.595	+14.9	+27.34	+5.53	.04074	.008602	.31807
20	.595	+14.8	+23.99	+4.51	.03574	.007006	.32089
21	.595	+12.1	+19.18	+3.21	.02858	.004988	.32233
22	.595	+11.0	+15.81	+2.33	.02356	.003629	.33158
23	.595	+9.6	+13.00	+2.26	.01937	.003514	.25527
24	.595	+8.5	+11.25	+1.59	.01677	.002470	.29250
25	.595	+8.7	+8.39	+1.16	.01249	.001807	.25716
26	.595	+7.8	+7.33	+1.14	.01093	.001780	.21362
27	.595	+6.3	+7.21	+1.12	.01075	.001746	.21242
28	.595	+5.6	+5.28	+1.07	.00786	.001661	.13969
29	0.000	+0.0	-.00	+.00	0.00000	0.000000	0.00000
30	0.000	+0.0	-2.21	+2.42	0.00000	0.000000	0.00000
31	0.000	+0.0	-564.67	+259.04	0.00000	0.000000	0.00000
32	0.000	+0.0	-.00	+.03	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 151 DATE :6 APRIL 1983 OAT= 51 BAROMETER= 30.042 WET BULB TEMP= 48 DR
Y BULB TEMP= 51
WIND CONDITIONS :0-3 EAST Z/R= 3
SUMMARY:S-76 WITH 20/35deg SWEEP AND 20 deg ANHEDRAL / TRACTOR TAIL ROTOR

CONFIGURATION FILE : DATA9 S76CIIIWEXT/WTail/New Torque
DATA FILE : TIP151:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.22396 in. = 4.68533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0819291

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :3 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001114 +.69276(Ct)^1.5 +178.595(Ct)^3

STANDARD DEVIATION = 5.20742E-15
MEAN ERROR = 1.13636E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+6.54	+144.04	0.00000	0.000000	0.00000
2	0.000	+0.0	+1189.44	+307.59	0.00000	0.000000	0.00000
3	0.000	+0.0	+1.21	+.76	0.00000	0.000000	0.00000
4	0.000	+0.0	-.79	+.05	0.00000	0.000000	0.00000
5	.601	-.0	+7.79	+48.44	.00130	.001435	.00656
6	.601	-.0	+9.50	+48.56	.00158	.001440	.00881
7	.600	+2.1	+83.23	+46.43	.01387	.001652	.19969
8	.600	+3.0	+113.86	+51.62	.01900	.001839	.28761
9	.600	+4.0	+161.74	+62.95	.02700	.002243	.39939
10	.600	+5.2	+220.75	+79.95	.03684	.002847	.50128
11	.600	+6.1	+277.07	+96.91	.04619	.003448	.58123
12	.600	+7.0	+338.19	+118.55	.05647	.004225	.64127
13	.600	+8.0	+401.64	+145.46	.06703	.005181	.67624
14	.600	+8.0	+399.22	+144.15	.06667	.005138	.67648
15	.600	+9.0	+471.54	+177.48	.07856	.006311	.70445
16	.599	+10.1	+535.91	+212.27	.08970	.007583	.71525
17	.599	+10.6	+560.51	+234.60	.09704	.008370	.72918
18	.600	+10.4	+564.04	+225.46	.09422	.008038	.72640
19	.600	+9.4	+491.37	+189.70	.08194	.006752	.70142
20	.601	+8.5	+438.34	+161.13	.07276	.005708	.69416
21	.601	+7.4	+365.53	+128.93	.06084	.004580	.66154
22	.601	+6.4	+300.32	+104.23	.04993	.003698	.60905
23	.601	+5.5	+243.92	+85.46	.04061	.003037	.54408
24	.601	+4.5	+187.80	+69.33	.03126	.002463	.45306
25	.600	+3.4	+133.13	+56.38	.02222	.002006	.33340
26	.600	-.0	+13.23	+39.81	.00221	.001419	.01478
27	0.000	-.0	+.79	+.05	0.00000	0.000000	0.00000
28	0.000	-.0	+6.54	+144.02	0.00000	0.000000	0.00000
29	0.000	-.0	+1189.55	+307.59	0.00000	0.000000	0.00000
30	0.000	-.0	+.48	+.68	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0002275 +1.66256(Ct)^1.5 +199.532(Ct)^3

STANDARD DEVIATION = 4.14515E-14
MEAN ERROR = 9.04945E-15

Pt.	Tip M#	THeta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-1.74	+2.42	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.67	+259.21	0.00000	0.000000	0.00000
3	0.000	+0.0	-.00	+.02	0.00000	0.000000	0.00000
4	0.000	+0.0	-.00	+.02	0.00000	0.000000	0.00000
5	.600	+.0	+.12	+.74	.00018	.001139	.00070
6	.600	+6.3	+6.94	+1.49	.01018	.002277	.15020
7	.600	+6.8	+9.72	+1.29	.01427	.001969	.28796
8	.600	+6.8	+9.64	+1.33	.01414	.002042	.27411
9	.600	+8.1	+11.08	+1.68	.01626	.002450	.28166
10	.600	+8.8	+12.73	+2.04	.01868	.003126	.27162
11	.600	+10.0	+17.11	+2.57	.02512	.003940	.33609
12	.600	+10.5	+20.70	+3.11	.03038	.004766	.36967
13	.600	+11.6	+22.47	+4.07	.03298	.006229	.31985
14	.600	+11.8	+26.09	+4.85	.03828	.007425	.33567
15	.600	+13.2	+29.34	+5.78	.04306	.008858	.33566
16	.600	+15.3	+38.64	+8.21	.05670	.012567	.35750
17	.600	+15.6	+38.29	+8.64	.05620	.013226	.33517
18	.600	+15.5	+38.33	+8.79	.05625	.013455	.32993
19	.600	+14.4	+34.61	+7.75	.05079	.011863	.32106
20	.600	+12.9	+28.18	+5.66	.04136	.008663	.32305
21	.600	+11.7	+24.48	+4.58	.03593	.007016	.32298
22	.60	+8.5	+17.73	+2.83	.02602	.004339	.32191
23	.60	+8.8	+13.99	+2.25	.02053	.003452	.28349
24	.600	+5.5	+11.87	+2.01	.01742	.003078	.24864
25	.600	+6.4	+8.01	+1.24	.01176	.001901	.22317
26	.600	+4.9	+7.83	+1.72	.01149	.002631	.15573
27	0.000	+4.9	+.00	+.02	0.00000	0.000000	0.00000
28	0.000	+4.9	-1.90	+2.42	0.00000	0.000000	0.00000
29	0.000	+4.9	-564.66	+259.01	0.00000	0.000000	0.00000
30	0.000	-6.6	-.00	+.02	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 152 DATE :6 APRIL 1983 10:11 OAT= 51 BAROMETER= 30.05 WET BULB TEMP= 49 DRY BULB TEMP= 51
WIND CONDITIONS :1-3 Knts SOUTHWEST Z/R= 3
SUMMARY:S-70 WITH 20/35deg SWEEP AND 20 deg ANHEDRAL / TRACTOR TAIL ROTOR

CONFIGURATION FILE : DATA9 S70[III]WEXT/wTail/New Torque
DATA FILE : TIP152:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 58.22396 in. = 4.68533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0815251

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :3 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001133 +.67401(Ct)^1.5 +220.381(Ct)^3

STANDARD DEVIATION = 3.57275E-15
MEAN ERROR = -8.42105E-16

Pt	Tip M#	Theta deg	THrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+7.34	+143.62	0.00000	0.000000	0.00000
2	0.000	+0.0	+1190.23	+307.62	0.00000	0.000000	0.00000
3	0.000	+0.0	+2.00	+.73	0.00000	0.000000	0.00000
4	0.000	+0.0	-.00	+.20	0.00000	0.000000	0.00000
5	.650	-.0	-13.55	+47.48	-.00194	.001438	.01184
6	.650	-.0	+8.14	+47.85	.00116	.001450	.00547
7	.650	+2.1	+84.94	+53.59	.01204	.001622	.16455
8	.650	+3.1	+125.66	+61.04	.01781	.001847	.25992
9	.651	+4.0	+178.56	+72.54	.02529	.002193	.37033
10	.650	+5.2	+258.43	+92.57	.03667	.002804	.50573
11	.649	+6.1	+320.78	+111.71	.04563	.003391	.58024
12	.649	+7.2	+404.07	+142.17	.05750	.004318	.64473
13	.648	+8.1	+468.56	+169.61	.06667	.005166	.67575
14	.649	+9.1	+552.99	+208.65	.07880	.006346	.70375
15	.650	+9.3	+573.86	+217.22	.08137	.006573	.71286
16	.650	+8.5	+496.81	+185.97	.07064	.005644	.67167
17	.649	+7.5	+421.29	+158.13	.05991	.004557	.64976
18	.650	+6.5	+349.32	+121.73	.04956	.003686	.60432
19	.650	+5.6	+284.95	+100.62	.04051	.003035	.54237
20	.649	+4.5	+222.34	+81.72	.03167	.002484	.45806
21	.649	+3.5	+157.93	+66.65	.02247	.002024	.33602
22	.650	+2.6	+107.70	+56.54	.01529	.001713	.22281
23	.650	+.8	+12.02	+47.43	.00171	.001438	.00991
24	0.000	+.0	+.00	+.20	0.00000	0.000000	0.00000
25	0.000	+.0	+7.35	+143.71	0.00000	0.000000	0.00000
26	0.000	+.0	+1188.90	+307.38	0.00000	0.000000	0.00000
27	0.000	+.0	-.00	+.83	0.00000	0.000000	0.00000

**********TAIL ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0003762 +1.47838(Ct)^1.5 +471.052(Ct)^3

STANDARD DEVIATION = 3.371786E-14
MEAN ERROR = -7.94737E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-2.06	+2.29	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.83	+259.38	0.00000	0.000000	0.00000
3	0.000	+0.0	-.15	+.11	0.00000	0.000000	0.00000
4	0.000	+0.0	-.31	+.00	0.00000	0.000000	0.00000
5	.649	-.0	+.04	+1.21	.00005	.001577	.00007
6	.649	+5.8	+7.46	+2.28	.00934	.002978	.10065
7	.649	+5.8	+8.35	+1.38	.01046	.001808	.19680
8	.649	+6.8	+11.28	+2.25	.01412	.002943	.18959
9	.649	+6.8	+12.90	+2.41	.01615	.003147	.21706
10	.649	+8.2	+16.55	+2.97	.02072	.003880	.25570
11	.649	+9.4	+18.20	+3.66	.02279	.004781	.23943
12	.649	+11.1	+23.05	+4.72	.02885	.006169	.26431
13	.649	+11.1	+27.85	+5.87	.03487	.007669	.28249
14	.649	+12.5	+32.88	+6.95	.04116	.009076	.30614
15	.649	+13.3	+37.07	+8.28	.04641	.010817	.30756
16	.649	+12.2	+31.13	+6.75	.03898	.008816	.29042
17	.649	+10.5	+28.65	+5.29	.03587	.006907	.32734
18	.649	+6.6	+21.12	+3.59	.02644	.004694	.30479
19	.649	+5.3	+16.17	+2.43	.02025	.003176	.30188
20	.649	+5.1	+14.56	+2.59	.01823	.003382	.24218
21	.649	+4.1	+8.75	+2.15	.01095	.002812	.13596
22	.649	+3.9	+9.79	+2.05	.01226	.002683	.16833
23	.649	+3.6	+8.81	+2.20	.01103	.002876	.13408
24	0.000	+0.0	+.31	+.00	0.00000	0.000000	0.00000
25	0.000	+0.0	-2.06	+2.29	0.00000	0.000000	0.00000
26	0.000	+0.0	-564.83	+259.39	0.00000	0.000000	0.00000
27	0.000	+0.0	+.46	+.01	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 153 DATE :6 APRIL 1983 19:10 OAT= 53 BAROMETER= 30.043 WET BULB TEMP = 46.5 DRY BULB TEMP= 52.5
WIND CONDITIONS :0-3 Knts SOUTHWEST Z/R= 3
SUMMARY:ISOLATED TRACTOR TAIL

CONFIGURATION FILE : DATA9 $70[[[]wEXT/wTail/New Torque
DATA FILE : TIP153:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.22396 in. = 4.68533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0615251

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :3 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0003185 +1.43177(Ct)^1.5 +21.248(Ct)^3

STANDARD DEVIATION = 7.64914E-14
MEAN ERROR = -1.97500E-14

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-1.74	+2.29	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.05	+259.20	0.00000	0.000000	0.00000
3	0.000	+0.0	+.62	+.01	0.00000	0.000000	0.00000
4	0.000	+0.0	+0.00	+0.00	0.00000	0.000000	0.00000
5	.550	+.8	+1.02	+.42	.00178	.000757	.03293
6	.550	+4.4	+3.43	+1.23	.00598	.002241	.06967
7	.550	+6.3	+7.09	+1.31	.01237	.002388	.19169
8	.550	+8.4	+13.06	+2.37	.02278	.004311	.26533
9	.550	+11.1	+18.74	+3.17	.03269	.005768	.34092
10	.550	+12.2	+26.71	+4.73	.04659	.008605	.38865
11	.550	+14.3	+33.96	+6.05	.05924	.011011	.43567
12	.550	+16.2	+43.45	+9.03	.07579	.016441	.42229
13	.550	+16.2	+41.98	+8.23	.07324	.014975	.44038
14	.550	+15.2	+37.79	+7.03	.06591	.012802	.43980
15	.550	+12.7	+28.50	+4.76	.04971	.008664	.42569
16	.550	+12.5	+21.66	+3.48	.03782	.006341	.38596
17	.550	+8.3	+17.91	+2.53	.03125	.004613	.39842
18	.550	+8.6	+12.92	+2.35	.02254	.004285	.26280
19	.550	+2.1	+2.91	+1.14	.00507	.002071	.05005
20	.550	+.8	+.77	+.28	.00135	.000512	.03212
21	0.000	+.0	+0.00	+0.00	0.00000	0.000000	0.00000
22	0.000	+.0	-2.05	+2.29	0.00000	0.000000	0.00000
23	0.000	+.0	-563.95	+259.34	0.00000	0.000000	0.00000
24	0.000	+.0	+.16	+.00	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 154 DATE :8 APRIL 1983 OAT= 52.5 BAROMETER= 30.063 WET BULB TEMP= 46.5 DRY BULB TEMP= 52.5
WIND CONDITIONS :ZERO -. Z/R= .75
SUMMARY:8-70 WITH 20/35 deg SWEEPT AND 20 deg ANHEDRAL / TRACTOR TAIL ROTOR

CONFIGURATION FILE : DATA9 870[111]EXT/wTail/New Torque
DATA FILE : TIP154:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.22396 in. = 4.68533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0819251

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :3 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001142 +.63216(Ct)^1.5 +212.722(Ct)^3

STANDARD DEVIATION = 2.87488E-16
MEAN ERROR = -9.09091E-17

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+6.34	+144.22	0.00000	0.000000	0.00000
2	0.000	+0.0	+1187.24	+307.35	0.00000	0.000000	0.00000
3	0.000	+0.0	-.99	+1.00	0.00000	0.000000	0.00000
4	0.000	+0.0	+1.00	+.05	0.00000	0.000000	0.00000
5	.600	+0.0	-14.58	+41.00	-.00243	.001458	.01658
6	.600	+0.0	-9.27	+40.96	-.00154	.001457	.00841
7	.600	+2.0	+59.32	+43.23	.00987	.001535	.12895
8	.601	+3.1	+96.86	+48.92	.01609	.001735	.23756
9	.600	+4.0	+138.94	+57.09	.02311	.002027	.34998
10	.600	+5.1	+200.67	+72.20	.03338	.002564	.48036
11	.600	+6.1	+262.78	+89.47	.04371	.003176	.58084
12	.600	+7.1	+333.71	+113.38	.05550	.004022	.65642
13	.600	+8.1	+400.89	+139.21	.06672	.004945	.70365
14	.600	+9.0	+467.58	+167.74	.07780	.005963	.73586
15	.600	+10.1	+536.14	+203.46	.08933	.007235	.74500
16	0.000	+0.0	-1.00	+.05	0.00000	0.000000	0.00000
17	0.000	+0.0	+6.34	+144.34	0.00000	0.000000	0.00000
18	0.000	+0.0	+1187.89	+307.69	0.00000	0.000000	0.00000
19	0.000	+0.0	-1.40	+.60	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0003664 +1.69686(Ct)^1.5 +90.161(Ct)^3

STANDARD DEVIATION = 1.32241E-14
MEAN ERROR = -4.18182E-15

Pt.	Tip Mθ	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-2.43	+2.17	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.51	+258.65	0.00000	0.000000	0.00000
3	0.000	+0.0	+.16	+.55	0.00000	0.000000	0.00000
4	0.000	+0.0	+.10	+.00	0.00000	0.000000	0.00000
5	.600	+.2	-.49	+1.12	-.00072	.001709	.00375
6	.600	+6.1	+6.55	+1.46	.00960	.002240	.13973
7	.600	+7.1	+9.18	+2.16	.01345	.003309	.15685
8	.600	+7.1	+9.45	+1.68	.01385	.002576	.21057
9	.600	+7.8	+10.76	+2.35	.01577	.003595	.18326
10	.600	+8.7	+13.42	+2.42	.01967	.003705	.24770
11	.600	+10.1	+16.05	+2.96	.02353	.004522	.26553
12	.600	+10.8	+20.62	+3.92	.03022	.005988	.29198
13	.600	+11.6	+24.17	+4.63	.03542	.007086	.31299
14	.600	+12.5	+27.77	+5.66	.04070	.008653	.31571
15	.600	+14.0	+35.86	+7.77	.05256	.011884	.33742
16	0.000	+0.0	-.10	+.00	0.00000	0.000000	0.00000
17	0.000	+0.0	-2.43	+2.22	0.00000	0.000000	0.00000
18	0.000	+0.0	-565.29	+259.10	0.00000	0.000000	0.00000
19	0.000	+0.0	+.05	+.00	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 155 DATE 17 APRIL 83 OAT= 61 BAROMETER= 30.091 WET BULB TEMP= 49 DRY BULB TEMP= 59
WIND CONDITIONS :ZERO Z/R= 1.2
SUMMARY:S-76 WITH 20/35deg SWEEP AND 230 deg ANHEDRAL / TRACTOR TAIL ROTOR

CONFIGURATION FILE : DATA9 S76[[[]WEXT/wTail/New Torque
DATA FILE : TIP155:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.223996 in. = 4.68533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0015291

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :3 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001153 +.05[illegible]^1.5 +229.631(Ct/s)^3

STANDARD DEVIATION = 1.84149E-15
MEAN ERROR = -2.27273E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+4.12	+143.91	0.00000	0.000000	0.00000
2	0.000	+0.0	+1185.73	+306.91	0.00000	0.000000	0.00000
3	0.000	+0.0	-2.51	+1.44	0.00000	0.000000	0.00000
4	0.000	+0.0	-.78	+.36	0.00000	0.000000	0.00000
5	.601	-.2	-13.91	+42.24	-.00231	.001498	.01498
6	.601	-.0	-14.06	+42.18	-.00234	.001496	.01524
7	.601	-.0	-17.84	+41.55	-.00296	.001473	.02212
8	.601	+3.1	+95.26	+49.63	.01583	.001760	.22844
9	.601	+4.0	+138.05	+58.28	.02293	.002066	.33935
10	.600	+5.0	+192.84	+70.93	.03193	.002518	.45767
11	.601	+6.1	+255.24	+89.64	.04230	.003171	.55397
12	.600	+7.0	+314.12	+108.41	.05224	.003848	.62647
13	.601	+8.1	+383.74	+137.17	.06363	.004855	.66756
14	.601	+9.0	+449.61	+166.24	.07476	.005900	.69951
15	.601	+10.1	+523.74	+203.18	.08707	.007209	.71954
16	.600	+10.6	+554.05	+220.27	.09224	.007827	.72265
17	.603	+9.6	+487.99	+184.20	.08040	.006478	.71058
18	.601	+8.5	+415.48	+150.61	.06905	.005344	.68560
19	.601	+7.6	+351.33	+123.01	.05838	.004363	.65278
20	.601	+6.5	+284.48	+98.87	.04728	.003480	.59654
21	.600	+5.6	+224.76	+79.98	.03738	.002839	.51393
22	.601	+4.5	+168.15	+64.63	.02794	.002292	.41135
23	.601	+3.6	+122.18	+54.57	.02029	.001935	.30170
24	.602	+2.5	+77.22	+46.29	.01278	.001636	.17842
25	.600	+1.5	+43.25	+41.92	.00719	.001488	.08280
26	.600	+.0	-13.81	+41.31	-.00230	.001467	.01517
27	0.000	+.0	+.78	+.36	0.00000	0.000000	0.00000
28	0.000	+.0	+6.75	+144.44	0.00000	0.000000	0.00000
29	0.000	+.0	+1188.74	+308.03	0.00000	0.000000	0.00000
30	0.000	+.0	+.38	+.48	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0004093 +1.94223(Ct)^1.5 -38.383(Ct)^3

STANDARD DEVIATION = 8.54025E-15
MEAN ERROR = -1.86364E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-2.10	+2.03	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.50	+259.30	0.00000	0.000000	0.00000
3	0.000	+0.0	+.17	+.11	0.00000	0.000000	0.00000
4	0.000	+0.0	+.07	+.04	0.00000	0.000000	0.00000
5	.601	+1.2	-2.28	+1.11	-.00334	.001699	.03773
6	.601	+.3	-.23	+1.02	-.000J4	.001561	.00135
7	.601	+4.8	+0.09	+2.11	.01183	.003226	.13268
8	.601	+4.8	+0.36	+2.09	.01223	.003183	.14133
9	.601	+7.5	+9.48	+2.30	.01386	.003509	.15476
10	.601	+8.4	+12.38	+2.61	.01811	.003988	.20340
11	.601	+9.8	+16.59	+3.32	.02427	.005063	.24851
12	.601	+9.8	+18.37	+3.92	.02686	.005977	.24512
13	.601	+11.3	+23.22	+4.94	.03397	.007545	.27611
14	.601	+12.5	+30.28	+6.67	.04429	.010187	.30448
15	.601	+13.5	+32.67	+7.37	.04779	.011255	.30884
16	.601	+14.6	+39.27	+9.26	.05745	.014128	.32429
17	.601	+13.3	+33.84	+7.41	.04833	.011318	.31232
18	.601	+11.4	+26.37	+5.49	.03858	.008384	.30075
19	.601	+10.2	+20.28	+4.41	.02967	.006739	.25237
20	.601	+9.4	+18.96	+3.79	.02774	.005779	.26604
21	.601	+6.2	+14.78	+3.04	.02150	.004645	.22578
22	.601	+4.7	+11.19	+2.45	.01637	.003734	.18665
23	.601	+5.8	+8.54	+2.13	.01250	.003259	.14268
24	.601	+5.8	+9.38	+2.17	.01372	.003313	.16145
25	.601	+5.5	+8.78	+2.16	.01284	.003301	.14673
26	.601	+4.3	+7.97	+2.13	.01166	.003253	.12998
27	0.000	+0.0	-.07	+.04	0.00000	0.000000	0.00000
28	0.000	+0.0	-2.24	+2.1(	0.00000	0.000000	0.00000
29	0.000	+0.0	-564.63	+258.90	0.00000	0.000000	0.00000
30	0.000	+0.0	-.08	+.18	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 156 DATE :7 APRIL 1983 10:00 OAT= 60 BAROMETER= 30.105 WET BULB TEM
P= 49 DRY BULB TEMP= 59
WIND CONDITIONS :LIGHT Z/R= 3
SUMMARY:ISOLATED TAIL ROTOR/TRACTOR

CONFIGURATION FILE : DATA9 $70[111WEXT/WTa11/New Torque
DATA FILE : TIP156:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.22396 in. = 4.68533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0819251

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :6 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0004183 +1.59999(Ct)^1.5 -155.711(Ct)^3

STANDARD DEVIATION = 2.24499E-15
MEAN ERROR = -6.00000E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-1.95	+2.17	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.54	+259.05	0.00000	0.000000	0.00000
3	0.000	+0.0	+.13	+.14	0.00000	0.000000	0.00000
4	0.000	+0.0	-.13	+.07	0.00000	0.000000	0.00000
5	.650	+.0	-.22	+1.29	-.00027	.001679	.00000
6	.650	+3.7	+1.18	+1.40	.00147	.001822	.01029
7	.650	+6.1	+5.08	+2.02	.00733	.002624	.07960
8	.650	+8.3	+13.14	+2.88	.01638	.003740	.18659
9	.650	+9.7	+20.88	+3.85	.02603	.005002	.27934
10	.650	+12.0	+34.12	+5.88	.04253	.007652	.38131
11	.650	+13.6	+44.63	+8.17	.05564	.010627	.41088
12	.650	+12.8	+41.07	+7.41	.05119	.009642	.39969
13	.650	+10.5	+35.27	+6.08	.04396	.007913	.38760
14	.650	+8.1	+24.32	+4.51	.03032	.005869	.29927
15	.650	+6.7	+21.99	+3.75	.02742	.004880	.30953
16	.650	+4.4	+13.08	+2.82	.01630	.003671	.18859
17	.650	+2.6	+7.34	+2.09	.00914	.002718	.10706
18	.650	+.0	+1.25	+1.39	.00156	.001808	.01133
19	.650	+1.3	+.53	+1.24	.00066	.001612	.00346
20	0.000	+0.0	+.13	+.07	0.00000	0.000000	0.00000
21	0.000	+0.0	-2.14	+2.17	0.00000	0.000000	0.00000
22	0.000	+0.0	-564.54	+259.22	0.00000	0.000000	0.00000
23	0.000	+0.0	+.12	+.13	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 157 DATE :7 APRIL 1983 12:40 OAT= 60 BAROMETER= 30.1 WET BULB TEMP= 49 DRY BULB TEMP= 59
WIND CONDITIONS :ZERO Z/R= .75
SUMMARY:S-76 WITH 20/35 deg SWEEP AND 20deg ANHEDRAL - PUSHER TAIL ROTOR

CONFIGURATION FILE : DATA9 S76[[[]wEXT/wTail/New Torque
DATA FILE : TIP157:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.22396 in. = 4.68533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0819251

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :6 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001142 +.63791(Ct)^1.5 +216.694(Ct)^3

STANDARD DEVIATION = 1.63145E-15
MEAN ERROR = -3.47926E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+6.54	+144.21	0.00000	0.000000	0.00000
2	0.000	+0.0	+1188.11	+308.00	0.00000	0.000000	0.00000
3	0.000	+0.0	-1.06	+1.33	0.00000	0.000000	0.00000
4	0.000	+0.0	-.13	+.36	0.00000	0.000000	0.00000
5	0.000	+0.0	+.00	+.31	0.00000	0.000000	0.00000
6	.600	+.0	-13.90	+41.97	-.00231	.001491	.01507
7	.600	+.0	-4.52	+42.15	-.00075	.001496	.00278
8	.600	+2.1	+56.26	+43.54	.00936	.001546	.11825
9	.600	+3.0	+96.26	+49.04	.01603	.001743	.23505
10	.599	+4.0	+145.09	+57.89	.02418	.002059	.36867
11	.600	+5.0	+200.18	+71.16	.03333	.002528	.48583
12	.600	+6.0	+258.99	+89.15	.04307	.003165	.57034
13	.600	+7.0	+318.08	+111.68	.05453	.003958	.64938
14	.600	+8.1	+398.48	+139.68	.06620	.004951	.69457
15	.600	+9.0	+465.99	+168.34	.07747	.005974	.72885
16	.599	+10.0	+538.84	+205.55	.08989	.007318	.74345
17	.599	+10.5	+564.56	+221.09	.09412	.007867	.74106
18	.600	+10.0	+535.92	+203.38	.08919	.007221	.74472
19	.600	+9.5	+492.68	+184.68	.08186	.006528	.72437
20	.600	+8.5	+423.34	+151.46	.07042	.005377	.70162
21	.600	+7.5	+353.39	+121.04	.05875	.004294	.66940
22	.600	+6.4	+291.56	+98.98	.04856	.003518	.61400
23	.600	+5.5	+236.08	+80.87	.03930	.002873	.54746
24	.600	+4.5	+176.13	+65.12	.02931	.002313	.43813
25	.600	+3.4	+121.23	+53.24	.02017	.001891	.30588
26	.600	+2.5	+73.93	+45.28	.01230	.001608	.17128
27	.600	+1.5	+45.17	+42.24	.00752	.001501	.09776
28	.600	-.0	-12.91	+41.48	-.00215	.001473	.01365
29	0.000	-.0	-.00	+.31	0.00000	0.000000	0.00000
30	0.000	-.0	+6.66	+144.80	0.00000	0.000000	0.00000
31	0.000	-.0	+1189.16	+309.81	0.00000	0.000000	0.00000
32	0.000	-.0	-.00	+.31	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0005343 -.03865(Ct)^1.5+2084.954(Ct)^3

STANDARD DEVIATION = 5.71007E-15
MEAN ERROR = 1.21739E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-1.96	+1.63	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.52	+259.14	0.00000	0.000000	0.00000
3	0.000	+0.0	+.14	+.08	0.00000	0.000000	0.00000
4	0.000	+0.0	+.14	+.08	0.00000	0.000000	0.00000
5	0.000	+0.0	+.04	+.04	0.00000	0.000000	0.00000
6	.000	+.3	+.74	+.92	.00109	.001411	.00846
7	.600	+7.4	+7.65	+1.50	.01120	.002289	.17225
8	.600	+7.4	+7.76	+1.36	.01136	.002071	.19444
9	.600	+6.4	+9.08	+1.57	.01329	.002403	.21211
10	.600	+8.2	+10.37	+1.64	.01518	.002509	.24807
11	.600	+9.4	+12.97	+2.11	.01899	.003216	.27085
12	.600	+9.1	+15.86	+2.31	.02322	.003533	.33319
13	.600	+10.8	+16.34	+2.78	.02392	.004248	.28967
14	.600	+12.7	+24.99	+4.04	.03658	.006171	.37724
15	.600	+14.5	+30.29	+5.29	.04432	.008086	.38398
16	.600	+18.4	+34.85	+11.03	.05102	.016852	.22757
17	.600	+20.1	+38.20	+13.61	.05592	.020793	.21163
18	.600	+18.4	+34.99	+9.98	.05123	.015241	.25314
19	.600	+17.3	+29.50	+7.62	.04318	.011646	.25639
20	.600	+16.0	+28.01	+6.00	.04100	.009162	.30154
21	.600	+13.6	+22.48	+4.44	.03290	.006777	.29301
22	.600	+12.1	+18.31	+3.39	.02680	.005186	.28157
23	.600	+10.7	+13.95	+2.69	.02042	.004105	.23639
24	.600	+8.6	+9.39	+1.99	.01375	.003034	.17685
25	.600	+7.1	+9.57	+1.92	.01401	.002930	.19837
26	.600	+7.8	+7.96	+1.78	.01165	.002716	.15413
27	.600	+7.6	+6.64	+1.64	.00972	.002506	.12722
28	.600	+7.5	+7.22	+1.80	.01057	.002750	.13141
29	0.000	+0.0	-.04	+.04	0.00000	0.000000	0.00000
30	0.000	+0.0	-2.14	+1.62	0.00000	0.000000	0.00000
31	0.000	+0.0	-564.31	+259.11	0.00000	0.000000	0.00000
32	0.000	+0.0	+.06	+.02	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN #: 150 DATE :7 APRIL 1983 13:40 OAT= 60 BAROMETER= 30.082 WET BULB TEM
P= 49 DRY BULB TEMP= 59
WIND CONDITIONS :ZERO Z/R= 1.2
SUMMARY:8-7C WITH 20/35 deg SWEEP AND 20deg ANHEDRAL - PUSHER TAIL ROTOR

CONFIGURATION FILE : DATA9 $70[111]WEXT/wTail/New Torque
DATA FILE : TIP150:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.22396 in. = 4.68533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0819251

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :4 NOVEMBER 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001136 +.63856(Ct)^1.5 +248.139(Ct)^3

STANDARD DEVIATION = 9.99132E-16
MEAN ERROR = -2.08333E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+6.93	+143.78	0.00000	0.000000	0.00000
2	0.000	+0.0	+1187.83	+387.48	0.00000	0.000000	0.00000
3	0.000	+0.0	-.41	+.87	0.00000	0.000000	0.00000
4	0.000	+0.0	+.26	+.86	0.00000	0.000000	0.00000
5	.600	+.1	-14.23	+41.37	-.00237	.001471	.01584
6	.600	-.0	-17.47	+41.41	-.00291	.001472	.02153
7	.600	+2.0	+54.96	+43.19	.00914	.001534	.11589
8	.600	+3.0	+88.79	+48.09	.01479	.001710	.21248
9	.600	+4.0	+140.14	+57.13	.02334	.002031	.35495
10	.599	+5.0	+192.26	+70.17	.03214	.002504	.46469
11	.600	+6.0	+248.93	+87.24	.04141	.003098	.54932
12	.600	+7.0	+313.26	+107.39	.05218	.003818	.63036
13	.599	+8.0	+377.46	+132.80	.06295	.004730	.67420
14	.600	+9.0	+448.58	+163.14	.07475	.005803	.71100
15	.600	+10.0	+520.83	+198.87	.08656	.007037	.73070
16	.599	+10.5	+559.90	+217.89	.09203	.007758	.72654
17	.600	+10.5	+545.11	+213.64	.09068	.007585	.72681
18	.599	+10.1	+517.78	+199.53	.08630	.007098	.72116
19	.600	+9.5	+483.68	+182.17	.08053	.006473	.71273
20	.600	+8.5	+418.68	+147.69	.06955	.005236	.70726
21	.600	+7.5	+352.94	+121.16	.05872	.004302	.66774
22	.601	+6.6	+284.40	+96.47	.04728	.003417	.60585
23	.600	+5.5	+219.28	+77.34	.03648	.002746	.51229
24	.600	+4.5	+163.78	+62.29	.02723	.002212	.41028
25	.600	+3.5	+114.23	+51.92	.01898	.001841	.28669
26	.600	+2.5	+67.16	+44.15	.01116	.001566	.15204
27	.600	+36.7	+35.46	+40.74	.00590	.001447	.06323
28	.600	+.0	-12.67	+41.19	-.00211	.001463	.01335
29	0.000	+.0	-.26	+.86	0.00000	0.000000	0.00000
30	0.000	+.0	+6.93	+143.78	0.00000	0.000000	0.00000
31	0.000	+.0	+1187.78	+387.72	0.00000	0.000000	0.00000
32	0.000	+.0	-.39	+.61	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0002982 +1.3888?(Ct)^1.5 +66.631(Ct)^3

STANDARD DEVIATION = 3.57689E-14
MEAN ERROR = -7.45833E-15

Pt.	Tip M#	Theta deg.	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-1.79	+1.61	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.66	+259.22	0.00000	0.000000	0.00000
3	0.000	+0.0	+.81	+.82	0.00000	0.000000	0.00000
4	0.000	+0.0	+.80	+.82	0.00000	0.000000	0.00000
5	.600	+.2	+1.90	+1.05	.00278	.001601	.03048
6	.600	+5.8	+6.73	+1.41	.00985	.002153	.15129
7	.600	+6.8	+8.23	+1.45	.01205	.002210	.19926
8	.600	+6.8	+9.15	+1.46	.01340	.002231	.23138
9	.600	+4.3	+9.55	+1.70	.01398	.002602	.21143
10	.600	+8.7	+13.76	+2.08	.02015	.003171	.30824
11	.600	+9.8	+17.27	+2.60	.02529	.003971	.33693
12	.600	+10.8	+17.90	+2.78	.02632	.004254	.33407
13	.600	+11.2	+23.26	+3.78	.03405	.005660	.36946
14	.600	+12.7	+28.18	+4.67	.04115	.007131	.38958
15	.600	+14.3	+33.52	+6.03	.04909	.009219	.39253
16	.600	+13.7	+35.88	+6.32	.05254	.009657	.41492
17	.600	+14.0	+37.13	+6.55	.05436	.010016	.42124
18	.600	+14.1	+35.73	+6.31	.05232	.009644	.41287
19	.600	+13.7	+32.39	+5.36	.04743	.008192	.41964
20	.600	+8.8	+22.95	+3.68	.03360	.005495	.37299
21	.600	+9.4	+19.47	+2.99	.02852	.004570	.38067
22	.600	+7.8	+14.43	+2.22	.02113	.003389	.30163
23	.600	+7.8	+13.92	+2.16	.02038	.003302	.29314
24	.600	+5.8	+13.16	+1.89	.01927	.002894	.30770
25	.600	+3.9	+9.81	+1.48	.01328	.002261	.22389
26	.600	+3.8	+8.37	+1.38	.01226	.002115	.21354
27	.600	+3.8	+7.83	+1.41	.01038	.002156	.16129
28	.600	+3.9	+7.30	+1.27	.01069	.001940	.18954
29	0.000	+0.0	-.00	+.82	0.00000	0.000000	0.00000
30	0.000	+0.0	-1.94	+1.59	0.00000	0.000000	0.00000
31	0.000	+0.0	-564.88	+259.54	0.00000	0.000000	0.00000
32	0.000	+0.0	+.10	+.02	0.00000	0.000000	0.00000

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EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 159   DATE :7 APRIL 1983   14:35   OAT= 60 BAROMETER= 30.068 WET BULB TEMP
= 49 DRY BULB TEMP= 59
WIND CONDITIONS :1-3 Knts NORTH   Z/R= 3
SUMMARY:S-70 WITH 20/35 deg SWEEP AND 20deg ANHEDRAL / PUSHER TAIL ROTOR

CONFIGURATION FILE : DATA9   ' "'S70[II]wEXT/wTail/New Torque
DATA FILE : TIP159:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.22396 in. = 4.68533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0815251

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :6 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

***********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001107 +.68493(Ct)^1.5 +207.195(Ct)^3

STANDARD DEVIATION = 2.99333E-15
MEAN ERROR = -8.00000E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+7.52	+143.64	0.00000	0.000000	0.00000
2	0.000	+0.0	+1187.90	+307.41	0.00000	0.000000	0.00000
3	0.000	+0.0	-.33	+.94	0.00000	0.000000	0.00000
4	0.000	+0.0	-.45	+.13	0.00000	0.000000	0.00000
5	.550	+0.0	-10.04	+33.83	-.00199	.001430	.01252
6	.550	+.0	-12.04	+33.89	-.00238	.001432	.01640
7	.550	+2.0	+44.92	+36.10	.00890	.001527	.11106
8	.550	+2.9	+80.21	+40.23	.01588	.001700	.23764
9	.550	+4.0	+115.58	+47.22	.02291	.001998	.35047
10	.550	+5.0	+158.78	+58.68	.03151	.002486	.45438
11	.550	+6.1	+217.25	+74.62	.04305	.003156	.57142
12	.550	+6.9	+254.23	+88.01	.05044	.003727	.61370
13	.549	+8.0	+302.93	+108.81	.06021	.004616	.64626
14	.550	+9.0	+362.39	+134.87	.07194	.005714	.68170
15	.550	+10.0	+426.13	+162.24	.08460	.006874	.72269
16	.551	+10.0	+419.65	+162.90	.08299	.006876	.70200
17	.549	+11.0	+470.48	+192.66	.09351	.008172	.70640
18	.548	+11.5	+498.69	+205.23	.09948	.008738	.72496
19	.550	+12.0	+523.51	+224.07	.10389	.009491	.71236
20	0.000	+0.0	+.45	+.13	0.00000	0.000000	0.00000
21	0.009	+0.0	+8.18	+143.79	0.00000	0.000000	0.00000
22	0.000	+0.0	+1187.90	+307.63	0.00000	0.000000	0.00000
23	0.000	+0.0	+.19	+.64	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0002791 +1.29255(Ct)^1.5 +14.010(Ct)^3

STANDARD DEVIATION = 3.59199E-14
MEAN ERROR = -9.60000E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-1.74	+1.61	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.56	+259.21	0.00000	0.000000	0.00000
3	0.000	+0.0	+.10	+.02	0.00000	0.000000	0.00000
4	0.000	+0.0	+.09	+.01	0.00000	0.000000	0.00000
5	.550	+.1	+.39	+.06	.00067	.001596	.00364
6	.550	+6.5	+6.57	+1.23	.01145	.002241	.18196
7	.550	+6.4	+8.41	+1.19	.01466	.002170	.27228
8	.550	+5.0	+8.13	+1.22	.01419	.002224	.25275
9	.550	+5.3	+8.58	+1.22	.01496	.002220	.27437
10	.550	+7.3	+8.67	+1.40	.01513	.002546	.24313
11	.550	+8.8	+13.73	+1.77	.02394	.003227	.38200
12	.550	+9.4	+14.92	+1.99	.02602	.003624	.38544
13	.550	+8.6	+18.58	+2.55	.03241	.004638	.41853
14	.550	+12.1	+24.19	+3.46	.04219	.006293	.45814
15	.550	+13.9	+27.44	+4.65	.04787	.008463	.41178
16	.550	+12.1	+29.48	+4.68	.05141	.008522	.45515
17	.550	+15.3	+35.64	+5.97	.06216	.010874	.47428
18	.550	+16.0	+38.53	+6.55	.06721	.011913	.48661
19	.550	+16.4	+42.41	+7.55	.07396	.013733	.48739
20	0.000	+0.0	-.09	+.01	0.00000	0.000000	0.00000
21	0.000	+0.0	-1.90	+1.61	0.00000	0.000000	0.00000
22	0.000	+0.0	-564.56	+259.21	0.00000	0.000000	0.00000
23	0.000	+0.0	-.14	+.02	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 160 DATE :7 APRIL 1983 15:45 OAT= 60 BAROMETER= 30.052 WET BULB TEM
P= 49 DRY BULB TEMP= 59
WIND CONDITIONS :8-3 SOUTH Z/R= 3
SUMMARY:S-76 WITH 20/35 deg SWEEP AND 20deg ANHEDRAL/ PUSHER TAIL ROTOR

CONFIGURATION FILE : DATA9 S76[[[[wEXT/wTail/New Torque
DATA FILE : TIP160:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.22396 in. = 4.68533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0819251

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :8 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001128 +.65734(Ct)^1.5 +278.514(Ct)^3

STANDARD DEVIATION = 4.70302E-15
MEAN ERROR = 9.60000E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+6.74	+143.62	0.00000	0.000000	0.00000
2	0.000	+0.0	+1187.00	+307.41	0.00000	0.000000	0.00000
3	0.000	+0.0	-1.24	+.94	0.00000	0.000000	0.00000
4	0.000	+0.0	-.07	+.05	0.00000	0.000000	0.00000
5	.600	+.1	-14.16	+41.74	-.00236	.001484	.01558
6	.600	+.1	-15.41	+41.46	-.00257	.001474	.01780
7	.600	+2.1	+53.59	+42.43	.00893	.001510	.11293
8	.600	+3.1	+91.62	+48.73	.01527	.001733	.21975
9	.600	+4.1	+131.47	+56.42	.02187	.002003	.32595
10	.601	+5.3	+194.05	+72.76	.03226	.002582	.45310
11	.600	+6.1	+244.60	+86.37	.04068	.003066	.54028
12	.600	+7.1	+304.06	+106.56	.05064	.003788	.60740
13	.600	+8.2	+375.40	+135.17	.06252	.004805	.65691
14	.600	+9.1	+427.24	+160.58	.07122	.005713	.67163
15	.600	+10.2	+500.95	+190.65	.08342	.007061	.68899
16	.599	+10.8	+543.88	+222.06	.09083	.007915	.69827
17	.599	+10.5	+528.61	+210.86	.08847	.007532	.70533
18	.599	+10.1	+498.94	+196.24	.08345	.007005	.69476
19	.600	+9.6	+472.86	+178.81	.07880	.006360	.70225
20	.600	+8.6	+408.54	+147.97	.06807	.005262	.68140
21	.600	+7.6	+341.32	+119.36	.05689	.004246	.64519
22	.601	+6.6	+275.11	+96.37	.04565	.003414	.57697
23	.600	+5.6	+224.28	+78.67	.03738	.002777	.52538
24	.600	+5.6	+220.69	+77.91	.03675	.002769	.51371
25	.600	+4.6	+163.29	+62.46	.02716	.002218	.40760
26	.600	+3.6	+113.79	+52.43	.01897	.001866	.28273
27	.599	+2.5	+74.26	+44.42	.01241	.001585	.17620
28	.599	+1.6	+44.60	+40.97	.00745	.001460	.09887
29	.599	+.1	-12.81	+40.61	-.00214	.001447	.01380
30	0.000	+.1	+.07	+.05	0.00000	0.000000	0.00000
31	0.000	+.1	+6.75	+143.94	0.00000	0.000000	0.00000
32	0.000	+.1	+1187.65	+307.69	0.00000	0.000000	0.00000
33	0.000	+.1	+.06	+.56	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0002560 +1.38699(Ct)^1.5 -60.697(Ct)^3

STANDARD DEVIATION = 3.25292E-14
MEAN ERROR = -6.64000E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-1.43	+1.63	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.36	+259.24	0.00000	0.000000	0.00000
3	0.000	+0.0	+.31	+.05	0.00000	0.000000	0.00000
4	0.000	+0.0	+.20	+.01	0.00000	0.000000	0.00000
5	.600	-.7	+.74	+.97	.00108	.001483	.00796
6	.600	+5.7	+6.37	+1.40	.00934	.002144	.14002
7	.600	+6.1	+7.35	+1.21	.01078	.001851	.20125
8	.600	+3.4	+9.61	+1.25	.01408	.001917	.29011
9	.600	+4.8	+9.90	+1.52	.01452	.002328	.25005
10	.600	+7.1	+12.02	+1.79	.01763	.002749	.28364
11	.600	+8.0	+15.10	+2.39	.02214	.003655	.29996
12	.600	+8.1	+19.73	+2.70	.02892	.004124	.39685
13	.600	+10.7	+23.85	+3.31	.03496	.005064	.42952
14	.600	+11.8	+28.71	+4.30	.04209	.006571	.43730
15	.600	+13.2	+37.19	+5.73	.05452	.008758	.48362
16	.600	+13.6	+38.86	+6.05	.05697	.009259	.48859
17	.600	+13.0	+31.82	+5.19	.04664	.007934	.42243
18	.600	+13.1	+34.79	+5.46	.05101	.008348	.45918
19	.600	+12.7	+31.10	+4.91	.04560	.007509	.43148
20	.600	+11.5	+26.75	+4.06	.03921	.006209	.41608
21	.600	+9.9	+21.42	+2.99	.03140	.004574	.40472
22	.600	+8.6	+16.41	+2.27	.02406	.003479	.35782
23	.600	+5.8	+10.83	+1.65	.01588	.002527	.26345
24	.600	+7.3	+13.33	+1.80	.01954	.002751	.33043
25	.600	+6.3	+12.63	+1.60	.01852	.002442	.34334
26	.600	+4.7	+11.55	+1.45	.01693	.002220	.33032
27	.600	+4.7	+7.96	+1.07	.01168	.001641	.25586
28	.600	+4.7	+6.91	+1.24	.01013	.001903	.17819
29	.600	+4.7	+7.60	+1.39	.01114	.002133	.18355
30	0.000	+4.7	-.20	+.01	0.00000	0.000000	0.00000
31	0.000	+4.7	-1.74	+1.60	0.00000	0.000000	0.00000
32	0.000	+4.7	-564.61	+259.33	0.00000	0.000000	0.00000
33	0.000	+4.7	-.20	+.02	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # 141 DATE 19 APRIL 1983 OAT= 59 BAROMETER= 29.93 WET BULB TEMP= 55 DRY BULB TEMP= 59
WIND CONDITIONS :ZERO Z/R= 3
SUMMARY:3-TO WITH 20/35deg SWEEP AND 20deg ANHEDRAL / PUSHER TAIL ROTOR

CONFIGURATION FILE : DATA9 ST0[1,1]WEXT/WTail/New Torque
DATA FILE : TIP181:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.22396 in. = 4.68533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0815251

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :6 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001128 +.68114(Ct)^1.5 +266.5854(Ct)^3

STANDARD DEVIATION = 7.66652E-15
MEAN ERROR = -1.71429E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+6.38	+143.75	0.00000	0.000000	0.00000
2	0.000	+0.0	+1187.97	+306.62	0.00000	0.000000	0.00000
3	0.000	+0.0	-.27	+1.73	0.00000	0.000000	0.00000
4	0.000	+0.0	+.93	+.54	0.00000	0.000000	0.00000
5	.650	+.0	-6.19	+46.76	-.00088	.001426	.00372
6	.650	-.0	-9.58	+46.50	-.00137	.001418	.00721
7	.650	+2.0	+80.33	+52.55	.01146	.001601	.15481
8	.650	+3.0	+120.94	+59.48	.01727	.001813	.25281
9	.650	+4.0	+179.28	+72.11	.02555	.002195	.37575
10	.650	+5.0	+245.39	+88.42	.03499	.002721	.48556
11	.650	+6.0	+309.81	+109.84	.04423	.003322	.56520
12	.650	+7.0	+383.73	+136.94	.05476	.004170	.62035
13	.650	+8.0	+450.37	+165.41	.06427	.005038	.65293
14	.650	+9.1	+543.24	+210.24	.07747	.006399	.68032
15	.650	+10.0	+624.41	+258.74	.08916	.007794	.68967
16	.649	+9.5	+585.21	+231.91	.08360	.007087	.69102
17	.650	+8.5	+491.64	+186.45	.07021	.005683	.66090
18	.650	+7.5	+432.03	+153.04	.06030	.004667	.64056
19	.650	+6.5	+351.93	+123.44	.05010	.003756	.60411
20	.650	+5.5	+287.90	+101.33	.04105	.003084	.54455
21	.650	+4.5	+220.30	+81.75	.03142	.002489	.45187
22	.650	+3.5	+154.86	+65.55	.02211	.001998	.33233
23	.650	+2.5	+106.51	+55.61	.01522	.001696	.22348
24	.650	+1.5	+62.37	+49.62	.00891	.001513	.11225
25	.650	-.0	+19.56	+48.08	.00279	.001464	.02034
26	0.000	-.0	-.93	+.54	0.00000	0.000000	0.00000
27	0.000	-.0	+6.38	+144.42	0.00000	0.000000	0.00000
28	0.000	-.0	+1186.64	+387.96	0.00000	0.000000	0.00000
29	0.000	-.0	-.53	+.29	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0003235 +1.09308(Ct)^1.5 +139.278(Ct)^3

STANDARD DEVIATION = 2.89624E-14
MEAN ERROR = -6.47619E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-1.55	+1.59	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.66	+259.27	0.00000	0.000000	0.00000
3	0.000	+0.0	+.00	+.07	0.00000	0.000000	0.00000
4	0.000	+0.0	+.00	+.00	0.00000	0.000000	0.00000
5	.650	+.9	+.52	+1.38	.00065	.001698	.00325
6	.650	+7.0	+8.67	+1.65	.01098	.002168	.17460
7	.650	+6.9	+8.88	+1.55	.01116	.002031	.19303
8	.650	+7.5	+10.51	+1.70	.01321	.002226	.22689
9	.650	+8.3	+14.56	+2.11	.01829	.002771	.29761
10	.650	+8.4	+14.39	+2.09	.01808	.002736	.29553
11	.650	+9.4	+19.63	+2.68	.02467	.003512	.36781
12	.650	+10.7	+24.29	+3.24	.03052	.004242	.41826
13	.650	+11.0	+27.33	+3.68	.03433	.004963	.42476
14	.650	+12.2	+36.59	+5.66	.04648	.007419	.47879
15	.650	+13.2	+44.00	+6.99	.05527	.009168	.47168
16	.650	+13.7	+40.41	+6.34	.05077	.008314	.45785
17	.650	+11.8	+35.13	+5.53	.04414	.007252	.42544
18	.650	+9.5	+24.98	+3.48	.03088	.004562	.39574
19	.650	+7.9	+19.84	+2.82	.02493	.003701	.35395
20	.650	+7.8	+17.78	+2.43	.02233	.003189	.34822
21	.650	+8.9	+14.48	+2.07	.01819	.002711	.30109
22	.650	+4.4	+11.39	+1.74	.01430	.002279	.24976
23	.650	+4.4	+11.24	+1.48	.01412	.001939	.28775
24	.650	+6.8	+7.51	+1.41	.00944	.001847	.16516
25	.650	+6.8	+7.67	+1.68	.00964	.002205	.14284
26	0.000	+0.0	-.00	+.00	0.00000	0.000000	0.00000
27	0.000	+0.0	-1.59	+1.56	0.00000	0.000000	0.00000
28	0.000	+0.0	-564.82	+259.18	0.00000	0.000000	0.00000
29	0.000	+0.0	-.00	+.04	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 162 DATE :8 APRIL 1983 11:05 OAT= 59 BAROMETER= 29.915 WET BULB TEMP = 56 DRY BULB TEMP= 59
WIND CONDITIONS :0-2 SOUTH Z/R= 3
SUMMARY:ISOLATED TAIL ROTOR/PUSHER

CONFIGURATION FILE : DATA9 $70[[[]wEXT wTail/New Torque
DATA FILE : TIP162:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 55.22998 in. = 4.60583 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0819251

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :6 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0003378 +.77133(Ct)^1.5 +70.712(Ct)^3

STANDARD DEVIATION = 8.23529E-18
MEAN ERROR = -2.85882E-19

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-1.51	+1.60	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.59	+259.21	0.00000	0.000000	0.00000
3	0.000	+0.0	+.00	+.02	0.00000	0.000000	0.00000
4	0.000	+0.0	+.02	+.02	0.00000	0.000000	0.00000
5	.550	+.8	-.02	+.05	-.00004	.001554	.00006
6	.550	+4.3	+3.86	+.97	.00679	.001772	.10498
7	.550	+6.4	+8.89	+1.21	.01562	.002223	.29216
8	.550	+8.2	+15.63	+1.85	.02745	.003391	.44538
9	.550	+10.6	+23.59	+2.77	.04145	.005085	.55207
10	.550	+12.8	+31.18	+3.72	.05477	.006809	.62628
11	.550	+12.7	+31.74	+3.78	.05575	.006925	.63247
12	.550	+14.7	+39.55	+5.18	.06948	.009495	.64179
13	.550	+16.8	+47.92	+6.80	.08417	.012456	.65231
14	.550	+15.4	+42.76	+5.69	.07511	.010425	.65699
15	.550	+13.6	+35.63	+4.29	.06258	.007859	.66279
16	.550	+11.2	+26.38	+2.84	.04629	.005206	.63643
17	.550	+8.7	+20.51	+2.26	.03603	.004146	.54884
18	.550	+6.8	+14.00	+1.60	.02460	.002941	.43648
19	.550	+4.5	+9.18	+1.21	.01612	.002215	.30756
20	.550	+2.7	+6.18	+1.03	.01086	.001884	.19985
21	.550	+.5	+1.35	+.83	.00237	.001530	.02508
22	0.000	+0.0	-.02	+.02	0.00000	0.000000	0.00000
23	0.000	+0.0	-1.61	+1.66	0.00000	0.000000	0.00000
24	0.000	+0.0	-564.64	+259.21	0.00000	0.000000	0.00000
25	0.000	+0.0	+.03	+.02	0.00000	0.000000	0.00000

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EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA-PROCESSING SYSTEM

RUN # : 163 DATE 18 APRIL 1983 11:35 OAT= 60 BAROMETER= 29.918 WET BULB TEM
P= 56 DRY BULB TEMP= 60
WIND CONDITIONS 10-2 SOUTH Z/R= 3
SUMMARY:ISOLATED TAIL ROTOR/PUSHER

CONFIGURATION FILE : DATA9 $70[3]WEXT/wTail/New Torque
DATA FILE : TIP163:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.22396 in. = 4.68533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0815251

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :6 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

************TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0003528 +.74120(Ct)^1.5 +92.572(Ct)^3

STANDARD DEVIATION = 3.73057E-15
MEAN ERROR = 1.07692E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-1.44	+1.59	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.57	+259.20	0.00000	0.000000	0.00000
3	0.000	+0.0	+.10	+.01	0.00000	0.000000	0.00000
4	0.000	+0.0	+.10	+.00	0.00000	0.000000	0.00000
5	.651	+.1	+.35	+1.13	.00044	.001483	.00206
6	.651	+5.1	+3.32	+1.26	.00416	.001650	.05414
7	.651	+7.3	+9.30	+1.65	.01166	.002154	.19456
8	.651	+9.2	+17.14	+2.07	.02149	.002711	.38671
9	.651	+11.2	+25.88	+2.94	.03246	.003850	.50538
10	.651	+13.5	+37.46	+4.35	.04697	.005687	.59560
11	.651	+15.5	+47.69	+5.85	.05981	.007661	.63520
12	.651	+14.0	+41.36	+4.84	.05186	.006331	.62082
13	.651	+12.4	+35.48	+3.99	.04449	.005227	.59746
14	.651	+10.1	+29.22	+3.23	.03664	.004227	.55209
15	.651	+8.0	+20.50	+2.34	.02571	.003057	.44869
16	.651	+4.4	+13.55	+1.81	.01699	.002364	.31180
17	.651	+.1	+.59	+1.30	.00075	.001702	.00398
18	0.000	+0.0	-.10	+.00	0.00000	0.000000	0.00000
19	0.000	+0.0	-1.59	+1.57	0.00000	0.000000	0.00000
20	0.000	+0.0	-564.57	+259.45	0.00000	0.000000	0.00000
21	0.000	+0.0	+.00	+.01	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 164 DATE :8 APRIL 1983 11:55 OAT= 58 BAROMETER= 29.91 WET BULB TEMP= 55 DRY BULB TEMP= 58
WIND CONDITIONS :0-2 SOUTH Z/R= 3
SUMMARY:ISOLATED TAIL ROTOR/PUSHER

CONFIGURATION FILE : DATA9 $70[II]wEXT/wTail/New Torque
DATA FILE : TIP164:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.22396 in. = 4.68533 ft.
CHORD : 3.6 in. = .3 ft.
SOLIDITY : .0815251

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :6 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

***********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0003443 +.78305(Ct)^1.5 +76.679(Ct)^3

STANDARD DEVIATION = 3.54404E-14
MEAN ERROR = -1.02308E-14

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-1.74	+1.62	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.37	+259.15	0.00000	0.000000	0.00000
3	0.000	+0.0	+.30	+.04	0.00000	0.000000	0.00000
4	0.000	+0.0	-.00	+.00	0.00000	0.000000	0.00000
5	.600	+.5	+.45	+1.11	.00066	.001708	.00330
6	.600	+5.5	+3.90	+.99	.00575	.001523	.09539
7	.600	+7.6	+9.37	+1.45	.01383	.002233	.24219
8	.600	+9.9	+17.90	+2.12	.02640	.003266	.43696
9	.600	+11.6	+25.26	+2.86	.03727	.004409	.54291
10	.600	+14.1	+34.49	+4.24	.05088	.006523	.58541
11	.600	+16.2	+44.70	+5.70	.06595	.008779	.64190
12	.600	+14.7	+38.89	+4.76	.05736	.007333	.62343
13	.600	+9.8	+24.78	+2.74	.03655	.004211	.55223
14	.600	+7.8	+16.36	+1.37	.02414	.002871	.43465
15	.600	+5.7	+12.08	+1.46	.01783	.002243	.35304
16	.600	+2.2	+2.40	+1.12	.00354	.001728	.04057
17	.600	+.6	+.50	+1.07	.00073	.001649	.00401
18	0.000	+0.0	+.00	+.00	0.00000	0.000000	0.00000
19	0.000	+0.0	-1.74	+1.58	0.00000	0.000000	0.00000
20	0.000	+0.0	-564.62	+259.22	0.00000	0.000000	0.00000
21	0.000	+0.0	+.00	+.00	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 165 DATE :11 APRIL 1983 10:25 OAT= 51 BAROMETER= 29.502 WET BULB TEM
P= 48.5 DRY BULB TEMP= 50
WIND CONDITIONS :0-1.5 SOUTH Z/R= 3
SUMMARY:H-34 CALIBRATION RUN

CONFIGURATION FILE : DATA12 H34[III]/wTail/New Torque
DATA FILE : TIP165:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 54.24996 in. = 4.52083 ft.
CHORD : 4.250004 in. = .354167 ft.
SOLIDITY : .099747

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :6 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0001138 +.94715(Ct)^1.5 +81.802(Ct)^3

STANDARD DEVIATION = 4.79087E-15
MEAN ERROR = 1.04545E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs.	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+6.22	+143.68	0.00000	0.000000	0.00000
2	0.000	+0.0	+1187.91	+307.13	0.00000	0.000000	0.00000
3	0.000	+0.0	-.32	+1.23	0.00000	0.000000	0.00000
4	0.000	+0.0	-.33	+.09	0.00000	0.000000	0.00000
5	.601	-.0	-.98	+35.83	-.00015	.001152	.00034
6	.600	+2.1	+26.11	+36.95	.00389	.001217	.04448
7	.601	+3.0	+58.15	+41.59	.00863	.001365	.13112
8	.601	+4.0	+102.82	+50.42	.01529	.001658	.25459
9	.600	+5.1	+166.11	+66.98	.02475	.002208	.39390
10	.600	+6.1	+219.90	+83.75	.03271	.002756	.47943
11	.600	+7.1	+279.27	+106.49	.04155	.003505	.53963
12	.600	+8.0	+338.61	+130.39	.05042	.004295	.58871
13	.601	+9.1	+414.45	+165.32	.06165	.005439	.62841
14	.599	+10.2	+484.45	+200.52	.07232	.006621	.65595
15	.600	+10.5	+505.94	+213.04	.07544	.007027	.65859
16	.601	+11.1	+542.08	+234.12	.08082	.007703	.66364
17	.600	+10.5	+502.17	+211.80	.07479	.006977	.65462
18	.601	+9.5	+444.50	+179.38	.06606	.005894	.64331
19	.601	+8.5	+370.38	+144.08	.05503	.004735	.60884
20	.601	+7.5	+310.27	+116.56	.04613	.003833	.57721
21	.601	+6.6	+252.27	+94.93	.03746	.003118	.51926
22	.600	+5.5	+192.64	+74.29	.02866	.002445	.44317
23	.601	+4.5	+145.01	+60.06	.02157	.001976	.35799
24	.601	+3.4	+86.91	+46.35	.01293	.001525	.21524
25	.600	+1.1	+8.17	+34.54	.00122	.001137	.00832
26	.601	-.0	+.61	+34.38	.00009	.001131	.00817
27	0.000	-.0	+.33	+.09	0.00000	0.000000	0.00000
28	0.000	-.0	+6.22	+143.96	0.00000	0.000000	0.00000
29	0.000	-.0	+1188.03	+307.55	0.00000	0.000000	0.00000
30	0.000	-.0	-.21	+.72	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 166 DATE :11 APRIL 1983 15:45 OAT= 57 BAROMETER= 29.55 WET BULB TEM
P= 50 DRY BULB TEMP= 57
WIND CONDITIONS :0-2 NORTHWEST Z/R= 3
SUMMARY:S-76 WITH 20 DEG AND 60% TAPER - REPEAT OF TIP017

CONFIGURATION FILE : DATA10 S76[1,1]WEXT/wTail/New Torque
DATA FILE : TIP166:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 56.04 in. = 4.67 ft.
  CHORD : 3.099996 in. = .258333 ft.
  SOLIDITY : .0704325

TAIL BLADE PROPERTIES :
  RADIUS : 11.499996 in. = .958333 ft.
  CHORD : 2.000004 in. = .166667 ft.
  SOLIDITY : .221433

PROCESSING DATE :6 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000911 +.67724(Ct)^1.5 +286.404(Ct)^3

STANDARD DEVIATION = 2.32125E-15
MEAN ERROR = -5.19048E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+6.19	+143.82	0.00000	0.000000	0.00000
2	0.000	+0.0	+1187.84	+307.33	0.00000	0.000000	0.00000
3	0.000	+0.0	-.39	+1.02	0.00000	0.000000	0.00000
4	0.000	+0.0	+.13	+.31	0.00000	0.000000	0.00000
5	.600	+.0	-3.24	+31.29	-.00064	.001324	.00230
6	.599	+2.0	+51.96	+34.71	.01028	.001470	.13300
7	.600	+3.1	+87.90	+40.77	.01736	.001724	.24895
8	.600	+4.0	+128.35	+48.12	.02537	.002037	.37238
9	.600	+5.1	+182.29	+60.65	.03590	.002563	.49963
10	.600	+6.1	+228.50	+76.10	.04518	.003222	.55935
11	.600	+7.0	+278.22	+91.44	.05501	.003871	.62537
12	.600	+8.0	+340.29	+113.59	.06712	.004798	.68018
13	.600	+9.0	+393.91	+137.87	.07764	.005819	.69769
14	.599	+10.0	+456.18	+171.15	.09022	.007248	.70161
15	.598	+11.0	+505.77	+201.76	0.00000	0.000000	0.00000
16	.599	+11.8	+508.04	+203.44	0.00000	0.000000	0.00000
17	.599	+10.3	+480.98	+183.72	.09536	.007799	.70846
18	.600	+9.4	+421.46	+152.34	.08322	.006441	.69943
19	.599	+8.4	+367.66	+126.65	.07272	.005364	.68602
20	.600	+7.6	+317.84	+105.72	.06269	.004465	.65972
21	.600	+6.5	+258.74	+83.75	.05102	.003536	.61156
22	.600	+5.4	+196.58	+65.20	.03877	.002755	.52004
23	.599	+4.4	+147.41	+52.51	.02915	.002224	.42004
24	.600	+3.5	+111.77	+44.96	.02208	.001902	.32374
25	.600	+2.3	+66.19	+36.74	.01307	.001553	.18050
26	.600	+1.4	+28.52	+31.82	.00562	.001343	.05890
27	.600	+.0	-3.02	+30.72	-.00060	.001298	.00210
28	0.000	+.0	-.26	+.29	0.00000	0.000000	0.00000
29	0.000	+.0	-.13	+.31	0.00000	0.000000	0.00000
30	0.000	+.0	+6.19	+144.22	0.00000	0.000000	0.00000
31	0.000	+.0	+1187.84	+307.98	0.00000	0.000000	0.00000
32	0.000	+.0	-.39	+.31	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 167 DATE :11 APRIL 1983 OAT= 57.5 BAROMETER= 29.962 WET BULB TEMP= 49.5 DRY BULB TEMP= 57.5
WIND CONDITIONS :0-2 NORTHWEST Z/R= 3
SUMMARY:3-76 WITH 20 DEG AND 60% TAPER/ PUSHER TAIL ROTOR

CONFIGURATION FILE : DATA10 S76[III]WEXT/w~~T~~ail/New Torque
DATA FILE : TIP167:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 56.64 in. = 4.67 ft.
  CHORD : 3.099996 in. = .258333 ft.
  SOLIDITY : .0784325

TAIL BLADE PROPERTIES :
  RADIUS : 11.499996 in. = .958333 ft.
  CHORD : 2.000004 in. = .166667 ft.
  SOLIDITY : .221433

PROCESSING DATE :6 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000906 +.71326(Ct)^1.5 +262.838(Ct)^3

STANDARD DEVIATION = 5.81154E-15
MEAN ERROR = -1.26818E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+6.92	+143.85	0.00000	0.000000	0.00000
2	0.000	+0.0	+1188.30	+307.47	0.00000	0.000000	0.00000
3	0.000	+0.0	+.07	+.88	0.00000	0.000000	0.00000
4	0.000	+0.0	-.32	+.85	0.00000	0.000000	0.00000
5	.551	-.0	-4.16	+26.21	-.00098	.001315	.00435
6	.551	+.0	-.56	+26.01	-.00013	.001304	.00022
7	.551	+2.1	+40.59	+28.48	.00948	.001425	.12162
8	.551	+3.0	+74.55	+33.93	.01746	.001701	.25442
9	.551	+4.0	+102.06	+40.02	.02384	.002002	.34504
10	.551	+5.0	+143.28	+49.99	.03347	.002500	.45955
11	.551	+6.0	+181.19	+61.63	.04234	.003084	.53014
12	.550	+7.1	+229.93	+77.51	.05393	.003893	.60376
13	.550	+8.0	+272.59	+93.73	.06389	.004704	.64423
14	.551	+9.0	+316.68	+112.54	.07416	.005643	.67154
15	.551	+10.0	+365.26	+138.79	0.00000	0.000000	0.00000
16	.549	+11.1	+417.74	+166.87	.09845	.008421	.68835
17	.550	+11.5	+441.99	+179.61	.10363	.009017	.69423
18	.549	+11.5	+439.31	+179.33	.10346	.009043	.69055
19	.550	+12.1	+466.46	+196.64	0.00000	0.000000	0.00000
20	.550	+10.5	+396.70	+153.12	.09326	.007708	.69337
21	.550	+9.5	+349.82	+128.74	.08220	.006477	.68272
22	.551	+8.5	+300.39	+105.35	.07034	.005283	.66273
23	.550	+7.5	+258.21	+86.78	.06055	.004357	.64161
24	.550	+6.5	+209.54	+68.44	.04923	.003443	.59536
25	.549	+5.5	+163.53	+55.48	.03850	.002797	.50691
26	.549	+4.5	+123.62	+44.97	.02907	.002264	.41082
27	.549	+3.5	+91.14	+37.33	.02146	.001882	.31341
28	.548	+.0	-3.10	+25.81	-.00073	.001306	.00285
29	0.000	+.0	+.32	+.85	0.00000	0.000000	0.00000
30	0.000	+.0	+6.92	+143.91	0.00000	0.000000	0.00000
31	0.000	+.0	+1188.95	+307.73	0.00000	0.000000	0.00000
32	0.000	+.0	+.32	+.64	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0003041 +1.33144(Ct)^1.5 +42.907(Ct)^3

STANDARD DEVIATION = 3.41610E-14
MEAN ERROR = -7.45485E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-2.08	+1.54	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.87	+259.19	0.00000	0.000000	0.00000
3	0.000	+0.0	-.20	+.08	0.00000	0.000000	0.00000
4	0.000	+0.0	-.08	+.01	0.00000	0.000000	0.00000
5	.550	+.5	+.04	+.93	.00008	.001718	.00014
6	.550	+3.0	+4.95	+1.31	.00877	.002432	.11244
7	.550	+4.2	+5.63	+1.21	.00999	.002245	.14789
8	.550	+3.2	+5.63	+1.19	.00998	.002208	.15024
9	.550	+6.0	+6.52	+1.37	.01156	.002526	.16398
10	.550	+7.0	+9.61	+1.66	.01704	.003069	.24114
11	.550	+8.0	+11.90	+1.99	.02109	.003678	.27716
12	.550	+8.5	+12.86	+2.19	.02280	.004058	.28235
13	.550	+9.4	+15.58	+2.56	.02762	.004734	.32258
14	.550	+9.7	+18.98	+3.18	.03350	.005873	.34745
15	.550	+10.6	+23.62	+4.01	0.00000	0.000000	0.00000
16	.550	+11.2	+29.55	+5.10	.05238	.009425	.42326
17	.550	+11.2	+29.19	+5.12	.05174	.009476	.41323
18	.550	+14.3	+32.37	+5.80	.05737	.010724	.42641
19	.550	+15.3	+35.48	+6.70	0.00000	0.000000	0.00000
20	.550	+9.8	+27.14	+4.76	.04811	.008800	.39904
21	.550	+11.6	+23.19	+3.69	.04111	.006834	.40580
22	.550	+10.2	+19.33	+3.08	.03427	.005689	.37105
23	.550	+8.9	+14.48	+2.35	.02567	.004348	.31473
24	.550	+8.5	+13.27	+2.10	.02351	.003883	.30902
25	.550	+7.1	+10.25	+1.75	.01817	.003241	.25147
26	.550	+6.0	+9.43	+1.69	.01671	.003128	.23031
27	.550	+4.1	+6.13	+1.28	.01087	.002374	.15886
28	.550	+4.5	+4.64	+1.29	.00822	.002379	.10428
29	0.000	+0.0	+.00	+.01	0.00000	0.000000	0.00000
30	0.000	+0.0	-2.18	+1.58	0.00000	0.000000	0.00000
31	0.000	+0.0	-564.87	+259.49	0.00000	0.000000	0.00000
32	0.000	+0.0	+.00	+.06	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 168 DATE :11 APRIL 1983 17:23 OAT= 57 BAROMETER= 29.59 WET-BULB TEMP= 49 DRY BULB TEMP= 57
WIND CONDITIONS :0-2 NORTHWEST Z/R= 3
SUMMARY:3-76 WITH 20 DEG AND 60% TAPER/ PUSHER TAIL ROTOR

CONFIGURATION FILE : DATA10 376[[[]WEXT/wTail/New Torque
DATA FILE : TIP168:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 56.04 in. = 4.67 ft.
  CHORD : 3.099996 in. = .258333 ft.
  SOLIDITY : .0704325

TAIL BLADE PROPERTIES :
  RADIUS : 11.499998 in. = .958333 ft.
  CHORD : 2.000004 in. = .166667 ft.
  SOLIDITY : .221433

PROCESSING DATE :6 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cqm= +.0000916 +.71636(Ct)^1.5 +283.287(Ct)^3

STANDARD DEVIATION = 2.85365E-15
MEAN ERROR = -5.38095E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+6.98	+143.50	0.00000	0.000000	0.00000
2	0.000	+0.0	+1198.22	+307.37	0.00000	0.000000	0.00000
3	0.000	+0.0	-.01	+.98	0.00000	0.000000	0.00000
4	0.000	+0.0	-.66	+.05	0.00000	0.000000	0.00000
5	.601	-.0	-4.11	+31.40	-.00001	.001320	.00326
6	.601	+.7	+10.69	+30.85	.00210	.001297	.01392
7	.601	+2.0	+40.82	+34.29	.00960	.001444	.12225
8	.601	+3.2	+90.56	+41.99	.01776	.001764	.25192
9	.602	+4.1	+127.87	+49.46	.02505	.002079	.35858
10	.601	+5.0	+166.82	+59.28	.03272	.002490	.44607
11	.601	+6.0	+214.50	+73.01	.04208	.003067	.52815
12	.601	+7.2	+276.97	+94.82	.05441	.003989	.59711
13	.601	+8.0	+323.28	+112.87	.06357	.004753	.63291
14	.601	+9.0	+383.39	+138.16	.07541	.005819	.66785
15	.601	+10.0	+444.24	+169.67	.08727	.007137	.67787
16	.600	+10.9	+495.96	+206.83	.09769	.008670	.67643
17	.601	+10.5	+475.75	+186.98	.09333	.007854	.68120
18	.601	+9.5	+414.14	+151.68	.08126	.006373	.68208
19	.601	+8.5	+361.74	+128.87	.07113	.005392	.66016
20	.601	+7.6	+308.03	+105.05	.06049	.004418	.63204
21	.599	+6.5	+244.51	+82.41	.04830	.003486	.57147
22	.601	+5.6	+201.39	+68.64	.03949	.002892	.51100
23	.601	+4.6	+150.70	+54.71	.02963	.002303	.41553
24	.601	+3.6	+105.80	+44.35	.02077	.001890	.29735
25	.601	+.1	+2.41	+30.91	.00047	.001300	.00149
26	0.000	+.1	+.66	+.05	0.00000	0.000000	0.00000
27	0.000	+.1	+7.25	+143.65	0.00000	0.000000	0.00000
28	0.000	+.1	+1198.88	+307.61	0.00000	0.000000	0.00000
29	0.000	+.1	+.65	+.66	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0004345 +1.16877(Ct)^1.5 +128.440(Ct)^3

STANDARD DEVIATION = 2.89624E-14
MEAN ERROR = -6.47619E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-2.36	+1.49	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.59	+259.24	0.00000	0.000000	0.00000
3	0.000	+0.0	+.00	+.04	0.00000	0.000000	0.00000
4	0.000	+0.0	-.05	+.04	0.00000	0.000000	0.00000
5	.601	+.0	+.17	+1.25	.00025	.001903	.00068
6	.601	+6.0	+6.13	+1.63	.00910	.002521	.11463
7	.601	+6.0	+5.68	+1.57	.00842	.002438	.10553
8	.601	+5.4	+6.28	+1.65	.00932	.002548	.11743
9	.601	+3.9	+9.03	+1.82	.01340	.002823	.16273
10	.601	+6.8	+11.41	+1.97	.01693	.003053	.24016
11	.601	+5.5	+12.73	+2.27	.01889	.003513	.24598
12	.601	+9.6	+16.91	+2.76	.02510	.004273	.30967
13	.601	+10.4	+19.49	+3.09	.02893	.004786	.34190
14	.601	+10.3	+25.94	+4.44	.03850	.006883	.36523
15	.601	+13.4	+31.20	+5.25	.04631	.008128	.40798
16	.601	+14.8	+37.17	+6.47	.05516	.010021	.43016
17	.601	+14.1	+34.12	+5.93	.05063	.009189	.41256
18	.601	+12.4	+28.74	+4.57	.04266	.007084	.41385
19	.601	+11.1	+24.38	+3.79	.03607	.005876	.38782
20	.601	+9.8	+17.52	+2.76	.02601	.004273	.32660
21	.601	+6.4	+14.85	+2.40	.02204	.003720	.29269
22	.601	+4.2	+9.60	+1.92	.01425	.002977	.19006
23	.601	+4.9	+8.98	+1.86	.01332	.002878	.17782
24	.601	+6.6	+7.74	+1.62	.01149	.002504	.16362
25	.601	+4.5	+5.46	+1.55	.00811	.002400	.10125
26	0.000	+4.5	+.03	+.04	0.00000	0.000000	0.00000
27	0.000	+4.5	-2.41	+1.52	0.00000	0.000000	0.00000
28	0.000	+4.5	-564.94	+259.21	0.00000	0.000000	0.00000
29	0.000	+4.5	+.03	+.03	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 169 DATE :11 APRIL 1983 18:04 OAT= 54 BAROMETER= 29.618 WET BULB TEMP = 47.5 DRY BULB TEMP= 54
WIND CONDITIONS :0-3 NORTHWEST Z/R= 3
SUMMARY:3-76 WITH 20 DEG AND 60% TAPER/ PUSHER TAIL ROTOR

CONFIGURATION FILE : DATA10 $76[I I]WEXT/WTail/New Torque
DATA FILE : TIP169:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
  RADIUS : 56.04 in. = 4.67 ft.
  CHORD : 3.999996 in. = .258333 ft.
  SOLIDITY : .0704325

TAIL BLADE PROPERTIES :—
  RADIUS : 11.499996 in. = .958333 ft.
  CHORD : 2.000004 in. = .166667 ft.
  SOLIDITY : .221433

PROCESSING DATE :6 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000929 +.75283(Ct)^1.5 +146.542(Ct)^3

STANDARD DEVIATION = 8.26797E-16
MEAN ERROR = -3.12500E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+6.91	+143.65	0.00000	0.000000	0.00000
2	0.000	+0.0	+1197.90	+307.56	0.00000	0.000000	0.00000
3	0.000	+0.0	-.33	+.79	0.00000	0.000000	0.00000
4	0.000	+0.0	-.32	+.12	0.00000	0.000000	0.00000
5	.651	-.0	-5.18	+37.67	-.00097	.001351	.00355
6	.651	+2.0	+57.63	+41.64	.00964	.001492	.11910
7	.651	+3.0	+97.46	+48.40	.01628	.001732	.22518
8	.651	+3.9	+138.84	+56.51	.02322	.002024	.32815
9	.651	+5.0	+196.21	+70.36	.03284	.002522	.44290
10	.651	+6.0	+254.18	+87.74	.04257	.003147	.52387
11	.651	+6.9	+320.19	+109.33	.05360	.003919	.59423
12	.651	+8.0	+400.52	+139.44	.06694	.004998	.65124
13	0.000	+9.0	+.32	+.12	0.00000	0.000000	0.00000
14	0.000	+9.0	+6.92	+143.59	0.00000	0.000000	0.00000
15	0.000	+9.0	+1188.56	+307.54	0.00000	0.000000	0.00000
16	0.000	+9.0	+.32	+.77	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0004140 +1.93784(Ct)^1.5-1575.888(Ct)^3

STANDARD DEVIATION = 3.96863E-15
MEAN ERROR = -1.50000E-19

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-2.28	+1.45	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.67	+259.19	0.00000	0.000000	0.00000
3	0.000	+0.0	-.00	+.00	0.00000	0.000000	0.00000
4	0.000	+0.0	-.00	+.00	0.00000	0.000000	0.00000
5	.650	+.8	+.63	+1.56	.00079	.002060	.00361
6	.650	+6.4	+8.16	+1.81	.01034	.002392	.14623
7	.650	+6.0	+7.90	+2.00	.01001	.002650	.12580
8	.650	+8.7	+8.89	+2.05	.01127	.002712	.14669
9	.650	+8.8	+12.47	+2.52	.01581	.003336	.19837
10	.650	+8.8	+16.13	+2.87	.02044	.003796	.25625
11	.650	+10.4	+16.57	+2.88	.02101	.003805	.26632
12	.650	+12.2	+12.79	+3.06	.01621	.004044	.16981
13	0.000	+0.0	+.00	+.00	0.00000	0.000000	0.00000
14	0.000	+0.0	-2.49	+1.42	0.00000	0.000000	0.00000
15	0.000	+0.0	-564.67	+259.32	0.00000	0.000000	0.00000
16	0.000	+0.0	-.00	+.04	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 170 DATE :12 APRIL 1983 16:10 OAT= 52 BAROMETER= 29.920 WET BULB TEMP = 44 DRY BULB TEMP= 52
WIND CONDITIONS :LIGHT 0 to 3 kts SW Z/R= 3
SUMMARY:3-76 w 20 Deg SWEEP & 60% TAPER/ PUSHER TAIL ROTOR/ REPEAT OF TIP169

CONFIGURATION FILE : DATA10 $76III3wEXT/wTail/New Torque
DATA FILE : TIP170:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.099996 in. = .258333 ft.
SOLIDITY : .0704325

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :6 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000920 +.74894(Ct)^1.5 +249.756(Ct)^3

STANDARD DEVIATION = 2.21477E-19
MEAN ERROR = 4.95238E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+5.96	+143.98	0.00000	0.000000	0.00000
2	0.000	+0.0	+1188.24	+386.98	0.00000	0.000000	0.00000
3	0.000	+0.0	+.01	+1.45	0.00000	0.000000	0.00000
4	0.000	+0.0	-.00	+.46	0.00000	0.000000	0.00000
5	.650	+.1	-5.53	+37.50	-.00092	.001333	.00391
6	.650	+.1	-6.29	+37.62	-.00104	.001337	.00473
7	.650	+2.0	+53.78	+40.78	.00893	.001450	.10924
8	.651	+3.0	+92.72	+46.09	.01537	.001706	.20947
9	.650	+4.0	+139.30	+57.69	.02314	.002052	.32190
10	.650	+5.0	+195.95	+71.78	.03251	.002550	.43134
11	.651	+6.0	+252.79	+88.61	.04188	.003144	.51167
12	.651	+7.0	+322.76	+110.73	.05348	.003929	.59079
13	.650	+8.1	+395.36	+139.38	.06566	.004954	.63738
14	.650	+9.0	+459.72	+169.64	.07626	.006026	.65585
15	.649	+10.0	+531.06	+210.89	0.00000	0.000000	0.00000
16	.650	+10.5	+560.97	+229.60	0.00000	0.000000	0.00000
17	.649	+9.5	+499.86	+191.21	.08312	.006808	.66051
18	.650	+8.4	+422.29	+152.48	.07003	.005414	.64226
19	.650	+7.5	+359.92	+126.68	.05977	.004505	.60871
20	.650	+6.5	+298.97	+99.87	.04823	.003545	.56075
21	.650	+5.5	+226.20	+79.27	.03750	.002814	.48425
22	.650	+4.4	+171.84	+64.03	.02850	.002274	.39711
23	.651	+3.5	+123.57	+53.09	.02048	.001884	.29187
24	.650	+2.5	+79.01	+44.46	.01311	.001579	.17829
25	.650	+1.5	+38.86	+38.45	.00646	.001368	.07117
26	.650	+.6	+13.18	+36.71	.00219	.001305	.01472
27	.650	-.0	-4.16	+37.56	-.00069	.001336	.00256
28	0.000	-.0	+.00	+.46	0.00000	0.000000	0.00000
29	0.000	-.0	+5.96	+144.42	0.00000	0.000000	0.00000
30	0.000	-.0	+1187.97	+388.10	0.00000	0.000000	0.00000
31	0.000	-.0	+.00	+.15	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0003978 +1.34513(Ct)^1.5 +28.418(Ct)^3

STANDARD DEVIATION = 2.12959E-15
MEAN ERROR = 4.76190E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-2.57	+1.73	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.91	+259.19	0.00000	0.000000	0.00000
3	0.000	+0.0	-.24	+.01	0.00000	0.000000	0.00000
4	0.000	+0.0	-.02	+.06	0.00000	0.000000	0.00000
5	.650	+.3	+1.68	+1.58	.00210	.002070	.01547
6	.650	+4.9	+7.17	+1.92	.00898	.002515	.11267
7	.650	+4.9	+8.72	+1.83	.01093	.002395	.15877
8	.650	+4.9	+8.46	+1.89	.01061	.002475	.14684
9	.650	+5.3	+9.77	+2.15	.01225	.002806	.16083
10	.650	+6.7	+13.54	+2.55	.01698	.003341	.22026
11	.650	+6.9	+15.20	+2.78	.01906	.003636	.24082
12	.650	+8.1	+19.61	+3.40	.02458	.004451	.28809
13	.650	+9.2	+22.79	+3.78	.02857	.004941	.32530
14	.650	+8.9	+29.30	+4.88	.03674	.006389	.36670
15	.650	+12.0	+37.95	+6.33	0.00000	0.000000	0.00000
16	.650	+13.0	+43.25	+7.34	0.00000	0.000000	0.00000
17	.650	+10.7	+31.27	+5.20	.03920	.006799	.37988
18	.650	+9.8	+26.98	+4.31	.03382	.005640	.36693
19	.650	+8.5	+21.88	+3.53	.02742	.004623	.32687
20	.650	+6.2	+17.14	+2.87	.02149	.003749	.27965
21	.650	+4.6	+15.31	+2.50	.01920	.003274	.27034
22	.650	+2.3	+9.33	+1.86	.01169	.002433	.17283
23	.650	+4.0	+8.39	+1.99	.01052	.002601	.13796
24	.650	+2.8	+8.58	+1.75	.01066	.002287	.16007
25	.650	+1.3	+4.86	+1.46	.00610	.001916	.08278
26	.650	+3.5	+6.39	+1.71	.00801	.002234	.10676
27	.650	+3.5	+6.39	+1.66	.00801	.002176	.10960
28	0.000	+0.0	+.02	+.06	0.00000	0.000000	0.00000
29	0.000	+0.0	-2.67	+1.73	0.00000	0.000000	0.00000
30	0.000	+0.0	-564.65	+259.19	0.00000	0.000000	0.00000
31	0.000	+0.0	+.02	+.06	0.00000	0.000000	0.00000

EXPERIMENTAL AEROMECHANICS

MODEL STAND COMPUTER DATA PROCESSING SYSTEM

RUN # : 171 DATE :12 APRIL 1983 16:56 OAT= 52 BAROMETER= 29.945 WET BULB TEMP = 44 DRY BULB TEMP= 52
WIND CONDITIONS :LIGHT 0 to 3 kts SW Z/R= 1.2
SUMMARY:S-76 w/20 Deg SWEEP & 60% TAPER/ PUSHER TAIL ROTOR

CONFIGURATION FILE : DATA10 S76[1,1]WEXT/wTail/New Torque
DATA FILE : TIP1:1:T14

FUSELAGE NOT PRESENT

MAIN BLADE PROPERTIES :
RADIUS : 56.04 in. = 4.67 ft.
CHORD : 3.099996 in. = .258333 ft.
SOLIDITY : .0784325

TAIL BLADE PROPERTIES :
RADIUS : 11.499996 in. = .958333 ft.
CHORD : 2.000004 in. = .166667 ft.
SOLIDITY : .221433

PROCESSING DATE :6 JUNE 1983
PROCESSING INFORMATION :FINAL PROCESSING

**********MAIN-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0000918 +.78612(Ct)^1.5 +208.207(Ct)^3

STANDARD DEVIATION = 9.39184E-16
MEAN ERROR = 1.95833E-16

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	+6.13	+143.62	0.00000	0.000000	0.00000
2	0.000	+0.0	+1187.76	+307.40	0.00000	0.000000	0.00000
3	0.000	+0.0	-.47	+.95	0.00000	0.000000	0.00000
4	0.000	+0.0	-.19	+.12	0.00000	0.000000	0.00000
5	.601	+.0	-2.92	+31.79	-.00057	.001323	.00192
6	.600	+.0	-1.39	+31.60	-.00027	.001315	.00063
7	.600	+2.0	+48.92	+34.83	.00952	.001451	.12010
8	.600	+3.1	+86.08	+41.07	.01673	.001709	.23762
9	.601	+4.1	+128.77	+49.78	.02502	.002069	.35921
10	.600	+5.0	+177.65	+61.43	.03453	.002557	.47097
11	.601	+6.1	+232.44	+77.80	.04517	.003237	.55650
12	.600	+7.1	+293.25	+97.89	.05705	.004078	.62705
13	.601	+8.1	+354.58	+121.15	.06889	.005040	.67322
14	.601	+9.1	+415.16	+146.40	.08061	.006087	.70563
15	.600	+10.0	+473.77	+176.46	.09231	.007343	.71490
16	.600	+11.0	+532.61	+209.12	.10364	.008713	.71855
17	.600	+11.5	+564.05	+229.01	0.00000	0.000000	0.00000
18	.600	+10.5	+503.45	+192.95	.09789	.008034	.71543
19	.600	+9.6	+449.33	+162.06	.08734	.006746	.71813
20	.600	+8.5	+381.83	+131.63	.07413	.005484	.69873
21	.601	+7.5	+322.84	+107.58	.06269	.004474	.65851
22	.600	+6.5	+261.01	+85.25	.05074	.003549	.60440
23	.601	+5.5	+202.37	+67.55	.03931	.002810	.52062
24	.600	+4.5	+153.46	+54.68	.02986	.002278	.42502
25	.601	+3.5	+108.04	+45.00	.02099	.001872	.30486
26	.601	+2.5	+71.64	+38.01	.01391	.001580	.19481
27	.601	+1.5	+33.72	+32.29	.00655	.001344	.07407
28	.601	+.5	+14.26	+31.08	.00277	.001293	.02116
29	.601	+.0	-.58	+31.10	-.00011	.001294	.00017
30	0.000	+.0	+.19	+.12	0.00000	0.000000	0.00000
31	0.000	+.0	+6.13	+143.78	0.00000	0.000000	0.00000
32	0.000	+.0	+1188.43	+307.88	0.00000	0.000000	0.00000
33	0.000	+.0	+.19	+.53	0.00000	0.000000	0.00000

**********TAIL-ROTOR PERFORMANCE**********

BEST CURVE FIT EQUATION: Cq= +.0004085 +1.18657(Ct)^1.5 +117.272(Ct)^3

STANDARD DEVIATION = 2.78760E-14
MEAN ERROR = -5.75000E-15

Pt.	Tip M#	Theta deg	Thrust lbs	Torque ft-lbs	Ct/Sigma	Cq/Sigma	Fig Merit
1	0.000	+0.0	-2.65	+1.69	0.00000	0.000000	0.00000
2	0.000	+0.0	-564.67	+259.30	0.00000	0.000000	0.00000
3	0.000	+0.0	-.00	+.11	0.00000	0.000000	0.00000
4	0.000	+0.0	+.00	+.09	0.00000	0.000000	0.00000
5	.600	+1.0	+2.01	+1.33	.00296	.002047	.02616
6	.600	+4.2	+5.89	+1.55	.00866	.002382	.11259
7	.600	+4.2	+6.28	+1.49	.00923	.002289	.12093
8	.600	+5.0	+7.81	+1.62	.01148	.002479	.16516
9	.600	+6.7	+9.96	+1.89	.01465	.002902	.20321
10	.600	+7.1	+9.51	+1.96	.01399	.003053	.19290
11	.600	+8.5	+13.61	+2.38	.02002	.003644	.25861
12	.600	+9.3	+16.28	+2.83	.02392	.004335	.29215
13	.600	+7.3	+21.57	+3.31	.03171	.005074	.37035
14	.600	+9.6	+24.14	+3.97	.03550	.006085	.36573
15	.600	+9.3	+31.67	+5.16	.04656	.007918	.42213
16	.600	+14.2	+35.78	+6.41	.05260	.009839	.40796
17	.600	+15.5	+40.92	+7.18	0.00000	0.000000	0.00000
18	.600	+14.3	+35.54	+5.97	.05226	.009165	.43372
19	.600	+13.0	+31.23	+4.92	.04592	.007547	.43386
20	.600	+10.7	+22.41	+3.45	.03295	.005286	.37658
21	.600	+9.6	+17.79	+2.78	.02615	.004259	.33037
22	.600	+8.4	+13.53	+2.28	.01990	.003491	.26746
23	.600	+7.6	+12.69	+2.07	.01866	.003183	.26638
24	.600	+5.2	+9.77	+1.84	.01436	.002820	.20302
25	.600	+4.6	+8.56	+1.61	.01259	.002468	.19048
26	.600	+3.7	+5.48	+1.39	.00806	.002132	.11293
27	.600	+3.7	+5.38	+1.38	.00790	.002115	.10837
28	.600	+3.3	+4.91	+1.46	.00722	.002242	.09189
29	.600	+3.6	+4.40	+1.36	.00647	.002090	.08282
30	0.000	+0.0	-.00	+.09	0.00000	0.000000	0.00000
31	0.000	+0.0	-2.59	+1.70	0.00000	0.000000	0.00000
32	0.000	+0.0	-564.67	+259.34	0.00000	0.000000	0.00000
33	0.000	+0.0	+.10	+.02	0.00000	0.000000	0.00000

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16. Abstract

With the acknowledgment of the existence of mutual interference between a hovering main rotor and a tail rotor, a model scale hover test was conducted in the Sikorsky Aircraft Model Rotor hover Facility to identify and quantify the impact of the tail rotor on the demonstrated advantages of advaneed geometry tip configurations.

The test was conducted using the Basic Model Test Rig and two scaled main rotor systems, one representing a 1/5.727 scale UH-60A BLACK HAWK and the others a 1/4.71 scale S-76. Eight alternate rotor tip configurations were tested, 3 on the BLACK HAWK rotor and 6 on the S-76 rotor. Four of these tips were then selected for testing in close proximity to an operating tail rotor (operating in both tractor and pusher modes) to determine if the performance advantages that could be obtained from the use of advanced geometry tips in a main rotor only environment would still exist in the more complex flow field involving a tail rotor.

The test showed that overall the tail rotor effects on the advanced tip configurations tested are not substantially different from the effects on conventional tips and the benefits obtained from advanced tips should be retained even when operating in the presence of a tail rotor.

17. Key Words (Suggested by Author(s))		18. Distribution Statement
Hover		Subject Category: 01
Helicopter	Aerodynamics	
Main Rotor	Performance	Unlimited
Tail Rotor	Interference	
Model Rotor Test	Tip Geometry	

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