

COMPARISON BETWEEN SOME U. S. NAVY AIRPLANES OF THE 1930's

Table 1. PERFORMANCE

Line Number	Manufacturer	Designation	V _{max} at Critical Altitude MPH	V _{min} at S.L. MPH Power Off	Max R/C at Critical Altitude Ft/Min	Climb in 10 Minutes From Critical Alt.	Service Ceiling/ Ft	Critical Altitude Feet	Endurance at V _{max} Hours	Range at V _{max} Miles
1	Grumman	XFF-1	194.6	60	2150	13900	23500	S.L.		
2	Grumman	XFF-1	201	63.5	1330	8900	22400	8000		
3	Grumman	XFF-1	201	63	1900	12500	20500	S.L.		
4	Grumman	XSF-1	194.2	62.5	1600	11500	20700	S.L.		
5	Grumman	SF-1	206	65			23400	4000	2.75	565
6	Grumman	XSF-2	215	62.5			24100	7500	2.13	457
7	Grumman	XSBF-1	215	66.5			26000	7500	2.5	525
8	Grumman	XSBF-1	209	68			23100	7500	1.9	380
9	Grumman	XF2F-1	229	64	2200	13600	29800	8400	1.3	310
10	Grumman	F2F-1	233	65.5	2100	13300	27500	7500	2.3	535
11	Grumman	XF3F-1	226	64.5	1750	11800	29500	7500	2.3	515
12	Grumman	F3F-1	231	65.5	1900	16600	28500	7500	2.3	530
13	Curtiss	BFC-2	202	64.5	1550	10400	25100	8000	1.5	303
14	Curtiss	XBF2C-1	229	69.	1900	11400	26000	8000	1.53	350
15	Curtiss	BF2C-1	225	69	1950	12200	27000	8000	1.53	344
16	Curtiss	BF2C-1	210	75			21400	8000	1.7	355
17	Curtiss	F8C-1	137.5	58	1210	8500	17300	S.L.		
18	Curtiss	XF8C-2	144.9	55	1500	10400	20800	S.L.		
19	Curtiss	F8C-4	145	60	1030	10000	19800	6000		
20	Curtiss	XF8C-7	178.6	63	1840	12500	20800	S.L.		
21	Curtiss	F11C-2	202	64.5	1550	10400	25100	8000	1.5	303
22	Curtiss	XF11C-3	229	69	1900	11600	26000	8000	1.24	265
23	Curtiss	XF13C-1	241	65	1600	9900	25500	10000	1.18	284
24	Boeing	F4B-4	184	62.5	1800	11200	24800	6000	1.13	209
25	Boeing	XF7B-1	239	70	2180	12600	29200	10000	1.25	300
26	Vought	XSBU-1	210	64			25900	8900	2.5	525
27	Vought	XSBU-1	197	65.5			24000	8900	1.75	345
28	Vought	SU-2	170.7	59	1520	10400	19500			
29	Gt. Lakes	BG-1	188	69			19000	8900	2.0	370
30	Martin	BM-2	145	61			15200	6000	1.8	260
31	Vought	SBU-1	205	65				8900	2.5	510

Compiled July 1957 by Jack Mc Rae

Table 2. CONDITION OF AIRPLANE DURING TESTS

Line Number	Designation	Gross Weight Pounds	% Useful Load	Engine	HP at Crit. Altitude	Normal Fuel, Gals	Power Loading lbs/hp	Wing Loading lbs/sq ft	Reference, NASA No.*	Remarks
1	XFF-1	3933	32.2	R-1820E	600		6.5	14	131	
2	XFF-1	4598	32.7	SR-1820F2	575		6.0	15.6	131	Modified
3	XFF-1	4565	33.0	R-1820F1	675		6.8	15.5	131	Modified
4	XSF-1	4376	35.1	R-1690C	625		6.7	15.6	127	
5	SF-1	5079	36.0		700	165	6.0	16.3	169	
6	XSF-2	4785	31.9		650	120	5.6	15.4	169	
7	XSBF-1	4989	31.9	R-1535-72	650	130	5.8	16.1	169	
8	XSBF-1	5432	37.5	R-1535-72	650		6.4	17.5	169	w/500# Bomb
9	XF2F-1	3490	27.6	XR-1535-44		80	4.1	15.2	165	
10	F2F-1	3795	30.8	R-1535-72		110	4.4	16.5	165	
11	XF3F-1	4100	29.9	R-1535-72		110	4.75	15.8	170	
12	F3F-1	4116	29.6	R-1535-84		110	4.8	15.8	170	Climb from S.L.
13	BFC-2	4130	27.4	R-1820-78		94	5.5	16.4	170	
14	XBF2C-1	5020	34.0	XR-1820-80		110	5.5	19.2	163	
15	BF2C-1	5090	34.6	R-1820-04		110	5.6	19.4	163	
16	BF2C-1	5090	34.6	R-1820-04			5.6	19.4	169	w/474# Bomb
17	F8C-1	3918	37.7	R-1300	432		9.1	11.1	131	
18	XF8C-2	3322	32.9	R-1340-B	488		6.8	10.4	131	
19	F8C-4	3729	33.3	R-1340-C	450		6.7	12.1	131	
20	XF8C-7	4274	30.8	R-1820-E	648		6.6	13.9	131	
21	F11C-2	4132	27.4	SR-1820-F	575	94	7.2		150	
22	XF11C-3	4495	25.9	R-1820-80	700	98	6.4		150	
23	XF13C-1	4160	21.9	XR-1510-94		70	4.8	20.3	170	
24	F4B-4	3085	25.2	R-1340-8		50	5.0	13.6	170	
25	XF7B-1	3579	24.6	R-1340-30		65	4.5	16.8	163	
26	XSBU-1	5170	33.6	XR-1535-34	700	145	5.3	15.8	169	
27	XSBU-1	5400	36.4	XR-1535-64	700		5.6	16.5	169	w/474# Bomb
28	SU-2	4468	33.9				7.3	13.7	169	
29	BG-1	6220	39.1	R-1535-66	700		6.4	16.4	169	w/989# Bomb
30	BM-2	6099	42.0	R-1590-14	600		8.2	14.6	169	w/989# Bomb
31	SBU-1	5347	32.6	R-1535-82	700	145	5.5	16.3	169	

*NASA Reference Number is Flight Test Section Report by U. S. Naval Air Station, Anacostia, D.C. See pages 145-177 of this Journal for photos of some of these a/c.