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Serial No. 8

AIRPLANE CHARACTERISTICS

FOR USE WITH

BLUE FLEET

ORANGE FLEET

RED FLEET

MANEUVER RULES

Cancels Edition of June, 1932

DECLASSIFIED IAW DOD MEMO OF 3 MAY 1972, SUBJ:
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NAVAL WAR COLLEGE

NEWPORT, R. I.

DEPARTMENT OF OPERATIONS

JUNE 1933

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S. A. Taffinder
S.A. TAFFINDER
Captain, U.S. Navy
Secretary.

NAVAL WAR COLLEGE
Newport, R.I.
1 June, 1933

I. PLANE				II. CREW AND EQUIPMENT										III. WEIGHT							IV. PERFORMANCE																
ASSIGNED TO	CLASS	MODEL	TYPE	ENGINE	CREW	NO.	GUNS		RADIO SETS			TANKS FOR		ATTACHMENTS FOR			MAX. LOAD				AT FULL SPEED			CRUISING SPEED													
							CAL.	MOUNT	AM 'N R'DS	NO.	KIND	DAY RANGE	DIRECTION FINDER	GAS	OIL	BOMBS	TORPEDO	SMOKE APP.	PLANE CREW AND EQUIPMENT	MAX. CROSS FLYING WEIGHT	INCLUDING GAS & OIL	OUTSIDE OF GAS & OIL	HORSEPOWER	KNOTS	CALS. GAS PER HOUR	RADIUS	CLIMB IN 10 MINS.	CELLING	KNOTS	CALS. GAS PER HOUR	RADIUS						
Cols.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37
CARRIER	VF	F4B-4	L	1A:1	2	30	1200	1	P	25	Yes	110	660	7	53	-	-	2 or 4	-	Yes	2609	3539	930	570	500	160	54	1.02	153	11200	24800	120	23.5	2.33	280		
DIRIGIBLE	VF	F9C-2	L	1A:1	2	30	1200	1	P	25	Yes	60	360	48	36	-	-	-	-	-	2408	2888	480	196	400	155	42.5	1.01	157	11300	19200	116	18.4	2.34	272		
CARRIER	VF	FF-1	L	1A:2	2	30	1200	1	P	25	Yes	120	720	8.5	64	-	-	2-116#	-	Yes	3555	4773	1208	424	600	175	60	2.00	350	11100	22400	131	28.4	4.23	550		
CARRIER	VF-VB	F11C-2	L	1A:1	2	30	1200	1	P	25	Yes	148	876	9	68	-	1	2-116#	-	-	3297	4596	1299	675	600	168	60	1.57	264	11600	21900	126	28.4	3.32	418		
CARRIER	VB	BM-2	L	1A:2	1	30	1000	1	T	250	Yes	164	984	13	97	1	1	-	-	Yes	4131	6131	2000	1316	600	126	61	1.71	216	6850	15200	94.5	28.4	3.66	346		
CARRIER	VT	TG-2	L-bomb	1A:3	2	30	1700	1	T	250	Yes	220	1320	15.0	113	1	3	12-116#	1	Yes	5432	8445	3013	1963	575	111	62.5	2.56	284	5450	13150	83.3	29.0	5.53	460		
CARRIER	VT	TG-2	L-torp.	1A:3	2	30	1700	1	T	250	Yes	225	1350	15.0	113	1	3	12-116#	1	Yes	5432	9150	3718	3058	575	111	62.5	1.60	178	4940	11600	83.3	29.5	3.39	283		
TENDER	VT	TG-2	S-bomb	1A:3	2	30	1700	1	T	250	Yes	220	1320	15.0	113	1	3	12-116#	1	Yes	5949	8962	3013	1963	575	109	62.5	2.56	279	4850	11450	81.8	30	5.31	434		
TENDER	VT	TG-2	S-torp.	1A:3	2	30	1700	1	T	250	Yes	220	1320	15.0	113	1	3	12-116#	1	Yes	5949	9657	3718	3058	575	109	62.5	1.60	175	4320	10400	81.8	31	3.24	265		
BATTLESHIPS	VO	O3U-3	S	1A:2	2	30	500	1	T	125	Yes	110	660	8	60	-	-	2-116#	-	Yes	3632	4517	917	167	550	138	53.1	2.07	286	8600	16600	103.5	23.3	4.73	490		
*DIRIGIBLE	VO	OJ-2	L	1A:2	2	30	500	1	T	125	Yes	90	540	8	60	-	-	2-116#	-	Yes	3093	3829	736	143	400	129	40.3	2.23	289	8850	15600	97.2	17.9	5.04	490		
VARIOUS (UTILITY)	VJ	OL-9	A	1A:2	2	30	582	1	T	300	Yes	140	840	10	75	-	-	4-116#	-	Yes	4305	5404	1099	463	450	106	43.5	2.21	235	6100	14300	79.5	20.6	4.66	370		
CRUISERS	VS	O3U-3	S	1A:2	2	30	500	1	T	250	Yes	110	660	8	60	-	-	2-116#	-	Yes	3632	4517	917	167	550	138	53.1	2.07	286	8600	16600	103.5	23.3	4.73	490		
CARRIERS	VS	SU-2	L	1A:2	2	30	500	1	T	250	Yes	130	780	8	60	-	-	2-116#	-	Yes	3571	4592	1021	301	600	148	59.8	1.84	272	10300	19500	111.0	25.5	4.25	472		
TENDERS	VP	P2Y-1	B-patrol	2A:5	3	30	3000	1	T	500	Yes	1200	7200	80	600	2	4	12-116#	-	Yes	12840	21045	8205	1605	1240	109	126.5	7.96	867	5000	11200	81.7	57.4	17.4	1422		
TENDERS	VP	P2Y-1	B-bomb	2A:5	3	30	3000	1	T	500	Yes	1200	7200	80	600	2	4	12-116#	-	Yes	12840	21045	8205	3585	1240	105	126.5	5.52	580	3950	9000	79	61.4	11.4	1195		
TENDERS	VP	PH-1	B-patrol	2A:5	4	30	2940	1	T	500	Yes	900	5400	60	450	2	4	12-116#	-	Yes	10047	16347	6300	1350	1150	117	119	6.30	735	5750	11400	87.7	52.8	14.2	1240		
TENDERS	VP	PH-1	B-bomb	2A:5	4	30	2940	1	T	500	Yes	900	5400	60	450	2	4	12-116#	-	Yes	10047	16347	6300	2340	1150	112	119	5.04	565	5100	9400	84	55.5	10.8	907		

* As yet no plane has been designated as a Dirigible VO; however, a plane of the characteristics of the OJ-2 could be so designated if desired.

EXPLANATION OF COLUMNS AND ADDITIONAL NOTES

I. PLANE	II. CREW AND EQUIPMENT	III. WEIGHT	IV. PERFORMANCE
Column 3	Includes items which plane always carries. In addition to items given here, every plane carries certain other equipment such as tools, visual signal gear, life belts, safety belts, and first aid kit.	Col. 23. Weight of plane and crew with all fixed equipment, but with no gas, oil, bombs, etc.	Cols. 31 and 37. Nautical miles.
A-amphibian	Col. 5. Gives crew carried for designated mission.	Col. 24. The max. total weight at which the plane can fly.	ADDITIONAL NOTES
B-boat	Col. 11. T-radio telegraph, P-radio phone.	Col. 25. The total useful load that can be carried, over and above the weight of crew and equipment. This weight may be used for gas, oil, bombs, flares, torpedo, smoke apparatus, additional machine gun ammunition, passengers or cargo, as permitted by the planes capacity and equipment; but the total weight of these items carried cannot exceed the figures given in this column.	
L-landplane	Col. 12. See also Sec. E, Maneuver Rules.	Col. 26. The total weight that can be carried, over and above the weight of crew, equipment and a normal load of gas and oil.	1. Weights of various items of variable load, in pounds - Gasoline, gal. 6; Oil, gal. 7.50 Bombs, 1000, 500, or 116; Smoke candles, 2.5; Parachute flares, 19.5. Torpedo, 1800; Machine gun ammunition, 100 rounds 30 cal. 6.9; 100 rounds 50 cal. 33.7; Passenger (including parachute & flying equipment), 200.
S-seaplane	Col. 13. Is taken to mean provision for radio compass.		2. Smoke tanks fit on bomb racks. Racks carrying 116# bombs can carry smoke tanks weighing 256#; those carrying 500 or 1000# bombs can carry smoke tanks weighing 800#.
Column 4	Col. 14-17. Above broken line is given max. tank capacity, below broken line is given fuel and oil carried as normal useful load.		3. Oil expenditure averages 5% of gas.
Number and type of engine.	It is to be noted that the weights and performances are based on the normal fuel and oil. In some cases the max. fuel and oil loads may be carried for special missions; in such cases the added weight will be considered as overload, and items of Ordnance or Equipment equal in weight to the added fuel and oil must be omitted.		
A-air cooled	(Col. 22. Bombs cannot be carried when plane is equipped as smoker.)		
W-water cooled			

EXTRACT FROM G.O. 178-The following policy approved by the Secretary of the Navy on May 22, 1928, is published for information and guidance: "That no information on the characteristics or performance of any airplane produced solely for the War or Navy Departments be published, given out to the press, magazines, or to the public in any form by any person until such airplane or engine has been adopted as standard service equipment for at least one year, or until such airplane or engine is rejected as standard service equipment by the department interested."