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AIRPLANE CHARACTERISTICS

FOR USE WITH

BLUE AND ORANGE FLEETS
BLUE AND RED FLEETS
AND
MANEUVER RULES

UNITED STATES NAVY

1940

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NAVAL WAR COLLEGE
Newport, R. I.
June, 1940

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(NWC-126)

Naval War College
Newport, R.I.
June 1, 1940.

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E. C. Kalbfus
Rear Admiral, U. S. Navy
President, Naval War College

Additional performance data on planes armed with the
325# depth charge.

(To be pasted in "Airplane Characteristics")

<u>CLASS</u>	<u>MODEL</u>	<u>BOMBS</u>	<u>PERFORMANCE</u>
VB	BT-1	2-325# depth	Same as with 1-500# bomb

VSB	SB2U-2	2-325# depth	Same as with 1-500# bomb
	SBD-2	" "	" " " " "
	SBC-4	" "	" " " " "

VTB	TBD-1	3-325# depth	Same as with 2-500# bombs

VOS	OS2U-1	2-325# depth	Same as smoker
or	SOC-3	" "	" " "
VSO	SON-1	" "	" " "

AIRPLANE CHARACTERISTICS

CONFIDENTIAL

3944-3344
5-7-40

(Approximations prepared for War College Chart Maneuvers only. June 1940)

Assigned To	AIRPLANE			EQUIPMENT														PERFORMANCE											Airplane Model								
	Class	Model	Type	GUNS				RADIO		ATTACHMENTS FOR				LOAD CONDITION	TIME TO CLIMB TO:		MAXIMUM SPEED			CRUISING SPEED			ECONOMICAL SPEED			FUEL	OIL										
				Number	Caliber	Mount	Rounds Ammunition	Total Number of Sets	Type	Normal Day Range	BOMBS (Class)				Torpedo	Smoke	Parachute Flares	Service Ceiling	10000'	20000'	Air Speed	Range	Endurance	Fuel Consumption	Air Speed			Range		Endurance	Fuel Consumption	Air Speed	Range	Endurance	Fuel Consumption		
											1000#	500#	325# Depth																							100#	Ft.
Column	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	
CARRIERS	VF	F2A-2	L	1	30	Fix	600	1	P	50	-	-	-	2	-	-	-	Fighter Bomber, 2-100#	34200	3.6	7.9	275	420	1.5	107	210	960	4.6	35	165	1160	7.0	23	160	11	F2A-2	
		F3F-3	L	1	30	Fix	500	1	P	50	-	-	-	2	-	-	-	Fighter Bomber, 2-100#	32900	3.9	9.2	230	345	1.5	91	170	770	4.7	29	135	920	6.7	19	130	9	F3F-3	
		F4F-3	L	2	30	Fix	1000	1	P	50	-	-	-	2	-	-	-	Fighter Bomber, 2-100#	32700	3.8	8.3	305	425	1.4	120	230	930	4.1	39	180	1110	5.1	26	150	11	F4F-3	
AND	VB	BT-1	L	1	50	Fix	200	1	P	100	1	1	2	2	-	1 L or 1 S	2	Bomber, 1-1000#	23700	9.4	26.0	185	200	1.1	89	140	440	3.2	31	111	490	4.3	23	100	8	BT-1	
			L	1	30	Flex	600		T	500								Bomber, 1-500#; or 2-100# Scout	24400	8.2	22.5	190	300	1.6	89	140	650	4.6	31	113	720	6.4	22	140	10		
LAND	VSB	SB2U-2	L	1	30	Fix	500	1	P	100	1	1	2	2	-	1 L or 1 S	2	Scout Bomber, 1-500#; or 2-100#	26500	7.9	20.2	220	440	2.0	89	165	990	6.0	30	135	1170	8.8	20	150	11	SB2U-2	
			L	1	30	Flex	600		T	500								Scout Bomber, 1-1000#	26300	8.1	20.8	220	240	1.1	89	165	540	3.3	30	130	610	4.7	21	100	8		
			L	1	30	Flex	600		T	500									Scout Bomber, 1-500#	24700	9.4	22.5	200	220	1.1	89	150	500	3.3	30	120	540	4.5	21	100	8	
BASES	VTB	TBD-1	L	1	30	Fix	500	1	P	100	1	3	3	12	1	1 L	2	Torpedo Bomber, 1-1000#; or 2-500#; or 8-100#; or Smoker	19400	12.2	49.3	180	170	.97	100	135	360	2.7	35	110	400	3.7	26	96	8	TBD-1	
			L	1	30	Flex	600		T	500								Bomber, 3-500#; or 8-100#	20400	10.7	38.3	180	320	1.8	100	135	700	5.2	35	105	770	7.2	25	180	12		
			L	1	30	Flex	600		T	500									*Scout (extra fuel tanks)	20400	10.7	38.3	180	590	3.3	100	135	1300	9.7	35	105	1460	13.7	24	330	12	
BATTLESHIPS	VJ	J2F-4	A	1	30	Flex	600	1	P	100	-	-	-	-	-	2 S	2	Utility; or Smoker (Light)	21800	9.2	32.9	155	280	1.8	83	115	590	5.1	29	93	700	7.5	20	150	10	J2F-4	
		OS2U-1	S	1	30	Fix	500	1	P	50	-	-	2	2	-	2 S	2	Observation Bomber, 2-100#	18400	13.1	-	150	500	3.3	44	115	960	8.4	17	100	1010	10.0	14	144	10	OS2U-1	
			S	1	30	Flex	500	1	T	200								Cruiser Smoker	18800	12.3	-	150	270	1.8	44	110	530	4.7	17	100	540	5.5	15	80	7		
CRUISERS	VOS	SOC-3	S	1	30	Fix	500	1	P	50	-	-	2	2	-	2 S	2	Scout Smoker	13600	19.4	-	140	390	2.8	61	105	780	7.4	23	84	880	10.5	16	170	13	SOC-3	
			S	1	30	Flex	600		T	200								Scout (Land)	13300	19.9	-	135	150	1.1	61	100	280	2.8	23	81	310	5.8	17	85	5		
			L																Scout (Land)	15500	14.6	-	145	330	2.3	61	110	670	6.2	23	87	790	9.1	15	140	10	
TENDERS	VPB	PHY-3	P	2	30	Flex	1500	2	P	500	4	4	4	12	2	1 L	8	Patrol Bomber, 4-1000#	19500	21.9	-	165	1450	8.9	195	120	3390	27.8	62	105	3720	38.5	49	1735	110	PHY-3	
			P	4	50	Flex	1600	2	T	200								Bomber, 4-1000#	18900	23.2	-	155	870	5.6	195	115	2110	18.0	61	105	2230	21.7	50	1095	73		
			P	1	30	Flex	1200	2	T	300-3000									Torpedo (2 Mk XIII)	22400	15.0	42.4	160	420	2.6	195	120	960	8.0	62	100	1050	10.3	49	500	35	
SHORE	VPT	PEBY-2	P	6	50	Flex	1200	2	P	50	12	12	12	20	2	1 L	8	Patrol Bomber, 4-1000#	24400	15.5	37.7	215	1630	7.6	470	160	3500	21.7	84	125	3730	30.4	65	1965	120	PEBY-2	
			P	2	30	Flex	800	2	T	200								Bomber, 12-1000#	25500	13.5	31.8	210	520	2.5	470	155	1240	7.9	149	155	1260	8.2	143	1176	79		
			P	2	30	Flex	800	2	T	300-3000									Torpedo (2 Mk XIII)	25500	13.5	31.8	210	920	4.4	470	155	1900	12.1	171	150	1950	13.1	158	2074	131	
LAND	VB(A)	A-20	L	2	30	Fix	500	1	P	75	1	2	-	10	-	-	2	Light Bomber, 1-1000#; 2-500#; 10-100# or 80 chemical or fragmentation	33500	5.0	10.0	395	600	1.52	244	847	800	2.3	160	218	1460	6.7	75	500	46	A-20	
			L	2	30	Flex	500	1	T	100									Light Bomber, 1-1000#; 2-500#; 10-100# or 80 chemical or fragmentation	30000	5.0	10.0	335	600	1.8	222	239	800	2.8	143	160	1640	10.25	49	500	46	A-20A
			L	3	30	Flex	500	1	T	100									Bomber, 4-1000#; or 6-500#; or 30-100#	24200	4	15	185	240	1.3	158	140	450	3.2	66	110	480	4.4	46	209	19	B-16
ONLY	VB(A)	B-18	L	3	30	Flex	500	1	T	500	4	6	-	30	-	-	2	Bomber, 1-1000#; or 2-500#; or 8-100# or Scout	24200	4	15	185	660	5.1	158	140	1700	12.2	66	110	1830	16.6	46	802	97		
			L	5	50	Flex	200	2	P	50	4	8	-	14	-	-	6	Bomber, 4-1000#; or 8-500#; or 14-100#	28800	4	12	220	590	2.8	299	165	1100	6.7	127	135	1240	9.2	92	850	90	B-17	
																		Bomber, 2-1000#; or 4-500#; or 8-100# or Scout	26000	4	12	230	1250	5.7	299	165	2260	13.7	124	135	2610	19.3	86	1700	130		

Column 1: VF Single Seat Fighter
VB Dive Bomber
VSB Scout or Dive Bomber
VTB Torpedo-plane or Sight Bomber
VOS Observation or Scout
VJ Utility
VS Scout
VP Patrol-plane or Sight Bomber
VB(A) Sight Bomber, Army

Column 3: L = Landplane S = Seaplane
P = Flying Boat (patrol-plane)
A = Amphibian
Note: Army airplanes are not equipped to land on carriers.
Column 6: Fix = Fixed Mount
Flex = Flexible Mount

Column 8: All models include a Radio Direction Finder.
Two airplanes of each squadron other than VF carry in addition a combination set of range P-50, T-200.
In VF squadrons, one liaison plane is so equipped.

Column 9: P = Radiophone
T = Radio Telegraph

Column 16: S = Small Tank
L = Large Tank

Column 17: Additional Flares may be carried in lieu of 100# bombs. In large airplanes they can be carried in quantity in the fuselage.

Column 34: 1 gal fuel = 6.0 lbs.
Column 35: 1 gal oil = 7.5 lbs.

* Not in use in U.S. Navy but may be used when installation is provided for in War College games.

** Also Tender and Shorebased.