HISTORICAL ENGINE SUMMARY

(BEGINNING 1930)

WAD Model	Military Model	Model Spec. No.	Sea Level Ratings Take-Off	Sea Level Ratings Normal	Weight	Length	Diameter (Height)	Red. Gear Ratio	Super Ratio	Comp. Ratio	Fuel Grade (or Octane)	TC No.	No. Built	Production Period	Installations
Wright Gipsey-L320-4 cylinder in line air cooled, 4.5" Bore, 5.0" Stroke															
L320, L320A	-	105	90/1950	90/1950	285	43.22	34.19	1:1	None	5.0:1	65	40	68	1930-34	CW Travel Air, Fairchild 22
											L320 Total		68		
Wright-Whirlwind 540-5 cylinder air-cooled radial-5.0" Bore, 5.5" Stroke															
R540A	R540-1	-	165/2000	165/2000	-	-	-	1:1	7.05	5.1:1	73	-			Stearman PT-9
R540E	R540-3	118	175/2000	175/2000	410	41.09	45.0	1:1	7.05	5.1:1	73	23			Vervilie PT-10
R540E1	-	-	190/2100	190/2100	415	-	45.0	1:1	7.05:1	6.0:1	73	-			Curtiss Robin J1, CW
R540D	-	102	180/2000	165/2000	405	40.63	45.0	1:1	7.09:1	5.1:1	73	23			Travel Air E-4000
											R540 Total		0		
Curtiss Challenger R600-6 cylinder Radial Air Cooled-5.125" Bore-4.875" Stroke															
R600	-	106	185/2000	185/2000	445	42.63	41.75	1:1	None	5.2:1	65	5	42	1931-34	Command-Aire 5C-3, Curtiss Fledgling, Curtiss Robin C1, C-2, and 4C-1A, CW Sedan 15-C, C-W Travel Air C-4000
											R600 Total		42		
Wright Whirlwind R760-7 Cylinder Radial Air Cooled, 5.0" Bore - 5.5" Stroke															
R760D	-	103	240/2000	240/2000	470	40.72	45	1:1	7.04:1	5.1:1	73	26	*		Stinson SM-2AC; Waco CRG, CSO; CW Sedan 15-D, CW Travel Air 4-D, 10-D
R760E	-	120	250/2000	250/2000	545	42.72	45	1:1	7.05:1	5.1:1	73	26	*		
R760E1	-	114	300/2250	285/2100	570	42.44	45	1:1	7.05:1	6.1:1	73	94	*		
R760E3	-	316	360/2300	345/2200	570	42.72	45	1:1	10.6:1	7.0:1	87	-			
R760F	-	583	375/2400	325/2300	635	-	45	1:1	-	6.3:1	87	-			
		(Representative Commercial Models Only are Listed)							* Total Commercial (all models)				1179	5/29-1/45	
R760ET	R760-1	115	235/2000	235/2000	540	42.44	45	1:1	None	6.1:1	73	126	4	12/39	St.Louis Aircraft XPT-15, YPT-15, PT-15
R760ET	R760-2	451	235/2000	235/2000	540	42.44	45	1:1	None	6.1:1	73				NAF N3N-1, -3
R760ET	R760-4	451	235/2000	235/2000	532	42.91	45	1:1	None	6.0:1	73		80	5/37-10/37	NAF N3N-1
R760E2	R760-6	243	350/2400	320/2200	570	42.44	45	1:1	9.17:1	6.3:1	80		1	4/38	NAF X N5N-1, N5N-1, Fairchild JK-1, F-45
R760ET	R760-8	764	235/2000	235/2000	554	42.87	45.25	1:1	None	6.1:1	73		150	7/40-3/41	NAF N3N-3
											Total Military		235		
											Commercial		1179		
											760 Total		1414		

HISTORICAL ENGINE SUMMARY

(BEGINNING 1930)

WAD Model	Military Model	Model Spec. No.	Sea Level Ratings Take-Off	Sea Level Ratings Normal	Weight	Length	Diameter (Height)	Red. Gear Ratio	Super Ratio	Comp. Ratio	Fuel Grade (or Octane)	TC No.	No. Built	Production Period	Installations
R-975 - 9 cylinder, Air Cooled Radial, 5" Bore, 5-1/2 Stroke - Whirlwind															
R-975D	-	104A	325/2000	300/2000	545	41-7/16	47	1:1	7.8:1	5.1:1		21	***		Atlantic C-9
GR-975E	-	122B	-	330/2050	630	45-11/32	45	1.57:1	None	5.1:1	73	21	***		Douglas YIC-21
R-975EC2	(Tank Engine)	295	-	400/2400				1:1	None	6.3:1	87		53395 **	1/38 - 6/45	Consolidated BT6
R-975EC3	(Tank Engine)	571	-	355/2400					None				23	1/39 - 3/39	Ford C-9
GR-975E1	-	167	-	365/2150	645	45-11/32	45	1.57:1	None	6.0:1	73	87	***		Gen. Avia. C-2B
GR-975E2 *	-	168A	-	420/2200	695	45-11/32	45	1.57:1	None	6.3:1	80	64	***		Gen. Avia. C-7A
GR-975E3 *	-	148A	-	440/2250	645	45-11/32	45	1.57:1	None	6.3:1	87		***		Stearman BT3, 76C3
SR-975E4	-	126D	465/2300	385/2300	685	43-15/32	45	1:1	10.15:1	7.0:1	87		***		Stearman YPT-9C
R-975F	-	577B	475/2400	425/2300	733	42.48	45	1:1	10.15:1	6.3:1	91	211	***		Cunningham Hall PT6E
R-975E27	R 975-7	648	400/2200	400/2200	695	42.48	45	1:1	7.8:1	6.9:1	92		438	5/36 - 3/38	North American - BT-9,
R-975E3	R 975-11	699	440/2250	420/2200	700	43.00	45.25	1:1	10.15:1	6.3:1	92		3197	9/40 - 1/44	-9A, 9B, 9C, 9D, Yale,
	R 975-24												1	5/36 - 5/36	NA16, NA34, NA46, NA57
R975E3	R 975-26	460	450/2250	420/2200	660	43-15/32	45	1:1	10.15:1	6.3:1	87		1	11/37 - 11/37	Pitcairn-Larsen YG-2
R-975E680	R975-28-30	680	450/2250	420/2200	700	43.00	45.25	1:1	10.15:1	6.3:1	92		850 **	10/40 - 1943	(Autogiro)
															Kellett YG-2
															Vultee BT-15
															Avro Anson
															Curtiss-Wright 19R
															SNC-1, Falcon 22
															Goodyear Airship K3,K4,
															K5,K6
															Can Car Avro Anson
															Koolhoven K-51, FK-56
															Bellanca PN, 31-42
															Lockheed 10
															Beech D-17R, 18R,
															18 Fokker C14W, T-8-W
															Ordnance Dept.
															Ford 4-AT-E

* Direct Drive Also Available
** Includes Licensee Production
*** Total Commercial Production

*** Total Commercial 2877
Total Military 57905
975 Total 60782

V1150-12 Cyl. 60° Vee Liquid Cooled 4.5" Bore 6" Stroke (Curtiss D-12)															
V1150-E		112	443/2300	435/2300	685	56-3/4	34-3/4	1:1		5.3:1	80	10	80	1931-1932	

HISTORICAL ENGINE SUMMARY

(BEGINNING 1930)

WAD Model	Military Model	Model Spec. No.	Sea Level Ratings Take-Off	Sea Level Ratings Normal	Weight	Length	Diameter (Height)	Red. Gear Ratio	Super Ratio	Comp. Ratio	Fuel Grade (or Octane)	TC No.	No. Built	Production Period	Installations
R-1300 (C7) - 7 cylinder, air cooled radial, 6.125" bore, 6.312" Stroke - Cyclone 7															
R1300A2		624A	600/2200	550/2150	875	44-1/4	50	1:1	7.0:1	6.45:1	87				
R1300A642		642A	600/2200	550/2150	885	46.38	50.13	1:1	7.0:1	6.45:1	100				
853C7BA1	R1300-1	853	800/2600	700/2400	1065	48.12	50.45	.5625:1	7.21:1	6.2:1	91/98		1953 *	2/49 - 2/54	Goodyear Airship ZP2M, No. American T-28A
865C7BA1	R1300-2	865	800/2600	700/2400	1067	48.12	50.45	1:1	7.21:1	6.2:1	91/96		45 *	9/49 - 1956	Goodyear Airship ZPG-1, -2, -2W (ZP2N)
871C7BA1	R1300-3	871	800/2600	700/2400	1080	49.68	50.45	1:1	7.21:1	6.2:1	91/96		1323 *	11/51- 1955	Sikorski Helicopter USMC-Hrs-3, USCG H04S3, USA H19D, USAF H19B, Vertol (Piasecki) USN HUP4
899C7BA1	R1300-4	899A	800/2600	700/2400	1092	48.12	50.45	.5625:1	7.21:1	6.2:1	91/96		50 *	1953-1957	Goodyear Airship/ZS2G-1
GR1300A2		591	700/2400	600/2300	950	47.43	50.00	3:2	7.0:1	6.45:1	87				
R1300A5		597	600/2200	550/2150	1675	42.8	50.13	1:1	Two Speed	6.45:1	87				
735C7BA1		735D	800/2600	600/2400	1025	49.0	50.24	.5625:1	7.21/8.69:1	6.2:1	91/98				
744C7BA1		744F	800/2600	600/2400	1015	48.12	50.45	.5625:1	7.21:1	6.2:1	91/98		7	10/46-4/47	Frye Fl; Hurel DuBois
957C7BA1		957C	800/2600	700/2400	1065	48.12	50.45	.5625:1	7.21:1	6.2:1	91/96	261	8*	1/52-10/53	HD 31, Dassault MD 316T, Hispano H-100
990C7BA1		990A	800/2600	700/2400	1070	49.68	50.45	1:1	7.21:1	6.2:1	91/96	289	155*	1956-1961	Sikorsky Helicopter S-55

* Includes Licensee Production

Total Commercial	170
Total Military	3371
Total	3541

HISTORICAL ENGINE SUMMARY

(BEGINNING 1930)

WAD Model	Military Model	Model Spec. No.	Sea Level Ratings Take-Off	Sea Level Ratings Normal	Weight	Length	Diameter (Height)	Red.Gear Ratio	Super Ratio	Comp. Ratio	Fuel Grade (Or Octane)	TC No.	No. Built	Production Period	Installations
R-1670 14 Cylinder 2 Row Air Cooled Radial - 5.25" Bore, 5.50" Stroke															
GR1670A1	-	301	830/2400	775/2400	1160	52-25/32	45	16:11	5.75:1	6.75:1	87	-	Dev.Only	1935-36	
GR1670B2C	-	472	850/2600	750/2500	1236	53-9/16	45	16:11	7.0:1	7.0:1	87	-	Dev.Only	1936	
											Total 1670		Zero		
R-1750 9 cylinder air cooled radial - 6" Bore, 6.875 Stroke (Predecessor of R-1820) Wright Cyclone															
R-1750E	-	101	552/1900	525/1900	840	43-27/32	56-11/32	1:1	8.74:1	5.1:1	73	-	-	(Pre 1930)	
V-1800 12 Cylinder Vee-Liquid Cooled - 5.625" Bore, 6.0" Stroke															
SGV1800	-	179	850/2400	735/2400	1340	78-3/4	43-1/8	7:5	8.26:1	7.1	87	-	-	1934	
											Total V1800		Zero		
R-1820 9 Cylinder Air Cooled Radial - 6.125" Bore, 6.875" Stroke															
GR1820E	-	119	595/1950	575/1950	945	48-5/16	53-3/4	1.58:1*	8.74:1	5.1:1	80	61	721	7/30-8/35	American C-24, Consolidated C11A, C-22, Douglas O-29A, O-38B, General Aviation C-15A
GR1820E-1	-	130	652/1950	620/1950	910	48-5/16	54-11/16	1.58:1*	8.74:1	6.25:1	80	-			
GR1820E-3	-	131	600/1900	600/1900	850	40-1/2	54-11/16	1:1	12.69:1	6.25:1	87	-			
							*Also offered with direct drive				Total 1820E		721		
GR1820-F1 *	-	138	700/1950	700/1950	1042	47-13/16	53-3/4	16:11	5.95:1	6.40:1	87	89			Douglas DC-2
GR1820-F2 *	-	169	663/1950	663/1950	1005	48-1/8	53-3/4	16:11	7.1:1	6.40:1	87	98			Douglas DC-2
GR1820-F3 *	-	161	712/1950	634/1950	1050	47-13/16	53-3/4	16:11	8.31:1	6.40:1	87	103			
GR1820-F5 *	-	162	517/1950	517/1950	1038	50-7/8	53-3/4	8:5	10:1	6.40:1	87	-			
GR1820-F9	-	241	850/2100	780/2100	1100	48-1/8	53-3/4	16:1	7.14:1/10.1:1	6.40:1	87	-			
GR1820-F11*	-	171	673/1950	673/1950	1042	47-13/16	53-3/4	16:11	5.95:1	5.75:1	80	97			
GR1820-F21*	-	128	644/1950	644/1950	1042	47-13/16	53-3/4	16:11	5.95:1	5.30:1	73	93			
GR1820-F31*	-	174	700/1950	638/1950	1042	48-1/8	53-3/4	16:11	5.95:1	6.40:1	80	101			Pilgrim 100B
GR1820-F32*	-	176	602/1950	602/1950	1030	48-1/8	53-3/4	16:11	7:1	6.40:1	80	-			
GR1820-F33*	-	178	620/1950	551/1950	1050	47-13/16	53-3/4	16:11	8.31:1	6.40:1	80	118	2859	6/32-5/43	
GR1820-F41*	-	163	582/1950	582/1950	1030	50-7/8	53-3/4	8:5	5.95:1	6.40:1	73	102			
GR1821-F42*	-	164	546/1950	546/1950	1030	50-7/8	53-3/4	8:5	7:1	6.4:1	73	-			
GR1820-F43*	-	165	497/1950	497/1950	1038	48-1/8	53-3/4	16:11	8.31:1	6.4:1	73	-			
GR1820-F51	-	323	875/2100	735/1950	1085	47-13/16	53-3/32	16:11	5.95:1	6.40:1	87	-			
GR1820-F52*	-	277	875/2200	730/2100	1095	47.81	54.09	16:11	7:1	6.40:1	87	148			Grumman G-23, J2 F4, Fokner C-11-W, Northrup Delta, Douglas DC2, Lockheed 14, Dornier DO-24
GR1820-F53	-	284	770/2200	670/2100	1095	47.81	54.09	16:11	8.31:1	6.40:1	87	149			Grumman G-23, Curtiss Hawk III, Northrup NA-69, Douglas DC-2
GR1820-F54*	-	289	640/2100	590/2100	1095	47.81	54.09	16:11	10:1	6.40:1	91	150			
GR1820-F55*	-	291	845/2100	770/2100	1072	48-1/8	53-3/4	16:11	7.14:1/10:1	6.40:1	87	-			
GR1820-F56*	-	312	770/2200	680/2100	1095	47.81	54.09	16:11	8.83:1	6.40:1	87	159			
GR1820-F62*	-	344	900/2350	760/2100	1095	47.81	54.09	16:11	7:1	6.40:1	87	148			Douglas DC-2, Lockheed 14
GR1820-F65*	-	559	900/2350	760/2100	1107	47.81	54.12	16:11	7.14/10.0:1	6.4:1	91	198			
											Total 1820F		2589	(Commercial)	

* Typical model only. Variations in installation features offered.

HISTORICAL ENGINE SUMMARY

(BEGINNING 1930)

WAD Model	Military Model	Model Spec. No.	Sea Level Ratings Take-Off	Sea Level Ratings Normal-S.L.	Weight	Length	Diameter (Height)	Red. Gear Ratio	Superch. Ratio	Comp. Ratio	Fuel Grade (or Octane)	TC No.	No. Built	Production Period	Installations
SR-1820-F3	R-1820-04	-	-	675/1950	937	43-3/8	53-3/4	1:1	8.31:1	6.4:1	87	-	37	4/34-2/35	
SR-1820-F2	R-1820-08	-	-	840/1950	937	43-3/8	53-3/4	1:1	7:1	6.4:1	87	-	10	6/35-6/35	Grumman JF-3
R-1820-F5	R-1820-10	-	-	770/1950	954	43-3/8	53-3/4	1:1	7.14:1/10:1	6.4:1	87	-	1	12/34-12/34	
GR-1820-F3	R-1820-12	-	-	700/1950	1047	48-1/8	53-3/4	16:11	8.31:1	6.4:1	87	-	14	5/34-9/35	Curtiss R-4C-1, Douglas R2 D-1
SGR-1820-F2	R-1820-17	-	-	675/1950	1047	47-13/16	53-3/4	8:5	7.0:1	6.4:1	87	-	62	5/33-9/35	Bellanca C27B, Curtiss C-30, Martin XB10M, XO-45, YB10M YB10AM, B-10, O-45
R-1820-F2	R-1820-20	-	-	691/1950	937	43-3/8	53-3/4	1:1	7:1	6.4:1	87	-	39	11/35-2/36	Grumman J2F-1
R-1820-F1	R-1820-21	-	-	670/1950	910	43-3/8	53-3/4	1:1	5.95:1	6.4:1	87	-	70	5/33-5/35	Curtiss A 12
GR-1820-F1	R-1820-23	-	-	670/1950	1042	47-13/16	53-3/4	8:5	5.95:1	6.4:1	87	-	8	1/33-7/33	Curtiss YC-30
SGR-1820-F2	R-1820-25	-	-	750/1950	1047	47-13/16	53-3/4	16:11	7.0:1	6.4:1	87	-	105	9/33-7/36	Bellanca C-27C, Douglas C-33, C-34, XC-32, XO-44, C-32, OA5, YOA-5, Kreider-Reisner XC-41, XC-4, XC-31; Martin A-15
SR-1820F2S	R-1820-27	-	-	770/1950	950	43-3/8	53-3/4	1:1	7.14:1/10:1	6.4:1	87	-	2	3/34-6/34	
R-1820-F2A	R-1820-30	482	790/1950	750/1950	979	43.375	53.84	1:1	7.0:1	6.40:1	87	-	112	3/38-2/40	Grumman J2F2, F2F2A, J2F-3, J2F-4
SGR-1820-F2	R-1820-31	-	-	675/1950	1010	47-13/16	53-3/4	8:5	7.0:1	6.4:1	87	-	1	1/34-1/34	Martin YB10A
SGR-1821-F3	R-1820-33	-	-	700/1950	1047	47-13/16	53-3/4	16:11	8.31:1	6.4:1	87	-	396	2/34-5/36	Martin B-10BM, B10B
R-1820-F3A	R-1820-36	-	-	730/1950	965	43-3/8	53-3/4	1:1	8.31:	6.4:1	87	-	1	7/39-7/39	Grumman J2F-3, J2F-4
SR-1820-F2	R-1820-37	-	-	690/1950	937	43-3/8	53-3/4	1:1	7:1	6.4:1	87	-	19	5/33-10/33	Northrup YA-13, Curtiss A-12, D-40B
R-1820-F53	R-1820-75	244	785/2200	745/2200	1000	43.38	54.09	1:1	8.31:1	6.4:1	87	-	5	8/42-8/42	North Am A-27 (NA-69)
SR-1820-F3	R-1820-80	-	-	625/1950	897	43.38	53-3/4	1:1	8.3:1	6.4:1	87	-	2	12/33-1/34	
SR-1820-F2	R-1820-84	-	-	740/1950	937	43-3/8	53-3/4	1:1	7:1	6.4:1	87	-	56	1/34-7/34	
GR-1820-F1	R-1820-88	-	-	675/1950	1042	47-13/16	53-3/4	8:5	5.95:1	6.4:1	87	-	3	5/33-5/33	
GR-1820-F2	R-1820-90	-	-	750/1950	1047	47-13/16	53-3/4	16:11	7:1	6.4:1	87	-	131	2/34-10/34	Consolidated P2Y-3 (2 Engines); XP2Y-2 (2 Engines)
R-1820-F2	R-1820-102	-	-	690/1950	937	43-3/8	53-3/4	1:1	7:1	6.4:1	87	-	10	5/35-6/35	
											Total	-	1084	(Military)	
													2589	(Comm.) (1820F)	
											Total 1820F		3673		

HISTORICAL ENGINE SUMMARY

(BEGINNING 1930)

WAC Model	Military Model	Model Spec. No.	Sea Level Ratings Take-Off	Sea Level Ratings Normal	Weight	Length	Diameter (Height)	Red. Gear Ratio	Super Ratio	Comp. Ratio	Fuel Grade (or Octane)	TC No.	No. Built	Production Period	Installations
GR-1820G202	*	588	1200/2500	1000/2300	1290	50.04	55.10	.5625	7.0:1	6.7:1	95	-			
GR-1820G202A	*	702	1200/2500	1100/2400	1310	48.22	55.10	.5625	7.0:1	6.7:1	91/96	219			Douglas DC-3, Lockheed
GR-1820G202B	*	596	1100/2500	950/2300	1310	50.04	55.10	.5625	7.0	6.3:1	87	-			18, Boeing SA307B-1
GR-1820G203	*	592	1100/2500	950/2300	1290	50.04	55.10	.5625	8.3:1	6.7:1	95		4155	12/39-6/45	
GR-1820G203A	*	593	1100/2500	950/2300	1310	50.04	55.10	.5625	8.3:1	6.7:1	90				
GR-1820G203B	*	703	960/2500	875/2300	1310	50.04	55.10	.5625	8.3:1	6.3:1	87				
GR-1820-G205	*	589	1200/2500	1000/2300	1302	50.04	55.10	.5625	7.14:1/10:1	6.7:1	95				
GR-1820G205A	*	704	1200/2500	1100/2400	1320	50.04	55.10	.5625	7.14:1/10:1	6.7:1	100				Lock. 18, 414-56, Grumman
GR-1820G205B	*	587	1100/2500	950/2300	1315	50.04	55.10	.5625	7.14:1/10:1	6.3:1	87				G36, Douglas BH-5, DB-73,
										Total Commercial			4155	(1820G200)	Vultee 48-B - Curtiss Wr. 75A-9, 75A-8, 75A-7, 75A-4 Brewster 339D, Northrup N3PB
	* Variations in Installation Equipment Offered														
Cyclone G251	R-1820-40	647	1200/2500	1000/2300	1315	48.4	55.12	.666	7.13:1/10.04:1	6.70:1	100		374	3/39-3/43	Douglas A24, A24B, SBD-3, SBD-5, Lockheed R-50, R-50-3 (2 engines) R-50-4, R-50-5 Brewster F2A2, F2A-2A, F2A-3, XF2A-4; Grumman XF4F-5, F4F-4B, F4F-5, F4F-5B Grumman F4F-4B
Cyc. G251-A	R-1820-40B	647	1200/2500	1000/2300	1315	48.4	55.12	.666	7.13:1/10.04:1	6.70:1	100		105	7/42-11/42	
Cyc. G253	R-1820-42	550	1200/2500	1000/2300	1320	50.04	55.12	.666	7.14:1/10:1	6.70:1	100		2	9/39-4/40	Grumman XF5F-1
	R-1820-46	623	1200/2500	1000/2300	1337	49.90	55.12	.666	7.13:1/10.09:1	7.50:1	100		1	10/40	
C9GC1	R-1820-48*	622	1200/2500	1200/2300	1422	57.4	55.12	.666	7.0/7.14/10.0	6.70:1	100		1	1/41	Brewster XFLA-4
C9GC1	R-1820-54	808	1050/2200	900/2100	1265	46.18	55.12	1.1	7.13:1/10.04:1	6.70:1	100		462	5/43-5/45	Grumman U2F6
Cyc. G251C	R-1820-60	647	1200/2500	1000/2300	1315	47.59	55.12	.666	7.13:1/10.04:1	6.70:1	100		5399	11/42-3/44	Douglas A-24, A-24B, Curtiss SBD-5
G666A	R-1820-65**	666	1200/2500	1000/2300	1315	47.59	55.12	.5625	7.00:1	6.70:1	100	*****	8422	2/40 - 8/42	Boeing B-17B, B-17C, B-17D, B-17E, B-17F, Grumman J2F5
G687	R-1820-67	687	1200/2500	1000/2300	1338	48.22	55.12	.666	?:1	6.70:1	100		1	8/40	Grumman XP-50
G688	R-1820-69***	688	1200/2500	1000/2300	1338	48.22	55.12	.666 ***	?:1	6.70:1	100		2	10/40-9/41	Grumman XP-50
C9GC1	R-1820-71	702	1200/2500	1000/2300	1310	50.04	55.10	.666	?:1	6.70:1	91/96	219	268	6/42-1/44	Douglas C-49, C-49A, C-49B, C-49C, C-49D, Lockheed C-60, C-56-E
C9GC	R-1820-73	722	1200/2500	1000/2300	1310	50.04	55.10	.666	?:1	6.70:1	95	-	118	10/40-3/41	Boeing B-17C
C9GC	R-1820-87	704	1200/2500	1000/2300	1320	50.04	55.10	.666	7.14:1/10:1	6.70:1	100	219	2422	2/42-11/43	Brewster 339-16, Douglas A-33 CW C-76, Lockheed A-29, C-63, A-29A, AT-18, C-60; Grumman F4F-4B
G200	R-1820-91	-	1200/2500	1000/2300	1320	47.64	55.12	.5625	7.14:1/10:1	6.70:1	100		10	10/41-6/42	Boeing B-17E
C9GC	R-1820-95	704	1200/2500	1000/2300	1320	50.04	55.10	.666	7.14:1/10:1	6.70:1	100	219	4	10/42	Curtiss P-36G (Hawk 75AB)
C9GC	R-1820-97***	-	1200/2500	1000/2300	1315	47.80	55.10	.5625	7.0:1	6.70:1	100	*****	64093	7/42 - 10/43	Boeing B-17E, B-17F, B-17G, Douglas B17F-DL, -19G-DL; Vega B17F-VE, 17G-VE; Northrup N-1-25A
781C9GC1 ****		781		800/2300	1350			1:1	7.0:1	4.95:1	80		134	6/41-9/44	
795C9GC1 ****		795		675/1950	1350			1:1	7.0:1	4.92:1	80				
											Total Military		81838		
											Total Commercial		4155		
											Total		85993		

* two speed, two stage gear driven supercharger
** For use with turbosupercharger
*** Reverse rotation propeller shaft
**** For installation in model T-1 Heavy Tank. Used Grade 80 Motor Fuel
***** Includes Licensee Production

HISTORICAL ENGINE SUMMARY

(BEGINNING 1930)

WAD Model	Military Model	Model Spec. No.	Sea Level Ratings Take-Off	Sea Level Ratings Normal	Weight	Length	Diameter (Height)	Red. Gear Ratio	Super Ratio	Comp. Ratio	Fuel Grade (or Octane)	TC No.	No. Built	Production Period	Installations
806C9HC1	R-1820-56	806	1300/2600	1200/2500	1333	47.56	55.12	.666	7.134:1/10.04:1	6.55:1	100	-	2186	10/42-5/44	Eastern FM-2
806C9HC1	R-1820-56W	806	1300/2600	1200/2500	1333	47.56	55.12	.666	7.134:1/10.04:1	6.55:1	100	-	3621	4/44 - 1/45	Ryan XFR-1, FR-1
806C9HC1	R-1820-56WA	806	1350/2700	1200/2500	1341	47.56	55.12	.666	7.134:1/10.04:1	6.55:1	100	-	1162	12/44-10/45	Eastern FM-2
805C9HC1	R-1820-62	805	1300/2600	1200/2500	1331	46.07	55.12	.666	7.0:1	6.55:1	100	-	550	3/43-2/45	Curtiss XSC-1, SC-1
805C9HC1	R-1820-62A	805	1350/2700	1200/2500	1339	46.07	55.12	.666	7.0:1	6.55:1	100	-	428	1/45-10/45	Curtiss SC-1
806C9HC3	R-1820-66	806	1300/2600	1200/2500	1333	47.56	55.12	.666	7.134:1/10.04:1	6.55:1	100	-	760	11/43-6/44	Douglas SBD-6
806C9HC2	R-1820-70	805	1300/2600	1200/2500	1315	46.07	55.12	.5625	7.0:1	6.55:1	100	-	6	1/44- 3/44	Eastern XF-2M-1
806C9HC7	R-1820-72A	806	1350/2700	1200/2500	1333	47.56	55.12	.666	7.134:1/10.04:1	6.55:1	100	-	40	7/44 - 9/44	Eastern FM-2
806C9HC7	R-1820-72WA	806	1350/2700	1200/2700	1341	47.56	55.12	.666	7.134:1/10.04:1	6.55:1	100	-	270	12/44-5/45	Ryan F 21
794C9HC1	R-1820-93	794	1350/2700	1200/2500	1330	47.77	55.12	.5625	7.01:1	6.55:1	100	-	40	2/43 - 10/43	Boeing B-17F
											Total C9HC Commercial		0		
											Total C9HC Military		9063		
													9063		
736C9HD2	-	736	1425/2700	1275/2500	1381	49.10	54.95	.5625	7.21:1/8.69:1	6.80:1	100/130	243	20	2/46-4/46	Douglas DC-4
736C9HD3	-	736	1425/2700	1275/2500	1376	49.10	54.95	.5625	7.21:1/8.69:1	6.80:1	100/130	243	8	9/46-12/46	-
740C9HD1	-	740	1425/2700	1275/2500	1368	49.10	54.95	.5625	7.21:1	6.80:1	100/130	243			Douglas DC-4
826C9HD3	-	826	1425/2700	1275/2500	1380	48.50	54.95	.666	7.21:1/10.14:1	6.80:1	100/130	-	16	1957-58	Grumman (SA-16)
977C9HD1	-	977	1425/2700	1275/2500	1349	48.50	54.95	1:1	7.21:1/10.14:1	6.80:1	100/130	243	205	1955-1961	Piasecki Helicopter PH-42, Vertol 44A,44B
977C9HD2	-	977	1425/2700	1275/2500	1349	48.50	54.95	1:1	7.21:1/8.69:1	6.80:1	100/130	243	47	1958-60	Vertol 44A, 44B
977C9HD3	-	977	1025/2700	1275/2500	1348	48.50	54.95	1:1	7.21:1	6.80:1	100/130	243	-		Vertol 44A, 44B
987C9HD1	-	987	1425/2700	1275/2500	1371	48.50	54.95	1:1	7.21:1/10.14:1	6.80:1	100/130	243	21	1954-58	Learstar Mark I
											Total C9HD Commercial		322		
826C9HD1	R-1820-74W	826	1425/2700	1275/2500	1400	47.69	54.95	.666	7.21:1/10.14:1	6.80	100/130		12	10/45-3/46	Eastern FM-2, Ryan FR-2, Columbia XJL-1, Grumman XJR 2F-1 Curtiss-Columbia SC-2
826C9HD2	R-1820-76	826	1425/2700	1275/2500	1360	47.69	54.95	.666	7.21:1/10.14:1	6.80	100/130		27	10/45-8/46	SC-2,JL1 Columbia,JR2F1 Grumman
826C9HD3 & 5	R-1820-76A&B	826	1425/2700	1275/2500	1380	47.69	54.95	.666	7.21:1/10.14:1	6.80	100/130		1506	4/49-1954	Grumman SA-16, UF1
834C9HD1	R-1820-78	834	1100/2500	1000/2300	1353	47.69	54.95	.666	7.21:1/10.14:1	6.30	91		4	3/46 - 7/46	SN 2U1 North American
896C9HD1	R-1820-86	896	1425/2700	1275/2500	1385	48.50	54.95	.666	7.21:1/10.14:1	6.80	100/130		1035	1953-1957	North American T-28B
826C9HD4	R-1820-101	826	1425/2700	1275/2500	1400	47.69	54.95	.5625	7.21:1/10.14:1	6.80	100/130		40	9/49-7/50	
863C9HD1	R-1820-103	863	1425/2700	1275/2500	1350	48.50	54.95	1:1	7.21:1/10.14:1	6.80	100/130		971	11/50-1957	Piaseck Helicopter USAF-H-21B USA-H--21C, Vertol 42A,42B
											Total C9HD Military		3595		
											Total Commercial		322		
											Total C9HD		3917		

HISTORICAL ENGINE SUMMARY

(BEGINNING 1930)

WAD Model	Military Model	Model Spec. No.	Sea Level Ratings Take-Off	Sea Level Ratings Normal	Weight	Length	Diameter (Height)	Red. Gear Ratio	Super Ratio	Comp. Ratio	Fuel Grade (or Octane)	TC No.	No. Built	Production Period	Installations
968C9HE1	-	968	1475/2800	1275/2500	1390	48.50	54.95	.5625	7.21:1	6.80:1	100/130	259	3	1950-1953	Douglas Super DC-3
968C9HE2	-	968	1475/2800	1275/2500	1395	48.50	54.95	.5625	7.21:1	6.80:1	100/130	259	11	1950	"
982C9HE1	-	982	1525/2800	1275/2500	1455	50.07	55.75	.5625	7.21:1	6.80:1	115/145	259	13	1955-1956	Hurel-Dubois HD321,HD-323
982C9HE2	-	982	1475/2800	1275/2500	1455	50.07	55.75	.5625	7.21:1	6.80:1	100/130	259	25	1957-1960	"
989C9HE1	-	989	1525/2800	1275/2500	1398	52.00	55.75	1:1	7.21:1	6.80:1	115/145	259	481	1955-1961	Sikorsky Helicopter S58
989C9HE2	-	989	1525/2800	1275/2500	1406	52.00	55.75	1:1	7.21:1	6.80:1	115/145	259	280	1956-1963	"
998C9HE1	-	998	1525/2800	1275/2500	1401	52.00	55.75	1:1	7.21:1	6.80:1	115/145	259	2	1959	Sikorsky S58A-B,-C
998C9HE2	-	998	1525/2800	1275/2500	1419	52.00	55.75	1:1	7.21:1	6.80:1	115/145	259	11	1962-1963	"
											Total C9HE Commercial (including licensee production)		826		
866C9HE1	R-1820-80	866	1475/2800	1275/2500	1404	48.50	54.95	.5625	7.21:1	6.80:1	100/130	259	289	1950-1956	Douglas RAD-8, -8Z
	R-1820-82	867	1525/2800	1275/2500	1469	50.10	55.74	.5625	7.21:1	6.80:1	115/145	-	2256	1952-1958	Grumman S2F
	R-1820-82A	867	1525/2800	1275/2500	1479	50.10	55.74	.5625	7.21:1	6.80:1	115/145	-	462	1960-1963	WF-2, S2F3, Grumman,SA-16
	R-1820-82WA	941	1675/2800 *	1275/2500	1484	50.10	55.74	.5625	7.21:1	6.80:1	115/145	-	266	1959-1960	WF-2
	R-1820-84	895	1525/2800	1275/2500	1405	52.00	55.74	.5625	7.21:1	6.80:1	115/145	-	1494	1954-1958	Sikorsky Helicopter
	R-1820-84A	895	1525/2800	1275/2500	1419	52.00	55.74	.5625	7.21:1	6.80:1	115/145	-	176	1959-1961	USAF-H-34, USA-H-34,
	R-1820-84B	895	1525/2800	1275/2500	1427	52.00	55.74	.5625	7.21:1	6.80:1	115/145	-	215	1957-1961	USMC-HUs, USN-HSS
	R-1820-84C	895	1525/2800	1275/2500	1419	52.00	55.74	.5625	7.21:1	6.80:1	115/145	-	108	1961-1962	
	R-1820-84D	895	1525/2800	1275/2500	1427	52.00	55.74	.5625	7.21:1	6.80:1	115/145	-	6	1961-1962	

* Water injection for take-off

Total C9HE Military (including licensee production)	5272
Total Commercial	826
Total C9HE	6098

HISTORICAL ENGINE SUMMARY

(BEGINNING (1930)

WAD Model	Military Model	Model Spec. No.	Sea Level Ratings Take-Off	Sea Level Ratings Normal	Weight	Length	Diameter (Height)	Red.Gear Ratio	Super Ratio	Comp. Ratio	Fuel Grade (or Octane)	TC No.	No. Built	Production Period	Installations
Wright Typhoon - Marine Engine - 12 Cylinder, Liquid Cooled, 60° Vee, 5.75" Bore, 6.25" Stroke - 1947 cu in. disp.															
TM-6	-	-	-	500/1900	1950	88-5/16	41	1:1	None	4.8:1	Motor	-	83	1930-32	
TM-6	-	390	-	600/2000	1950	88-5/16	37	1:1	None	5.3:1	73	-			
TM-6	-	390	-	650/2000	1950	88-5/16	37	1:1	None	6.5:1	87	-			
												Total Typhoon	83		
GM2120 - 12 Cylinder 2-Row Liquid Cooled Radial - 6.125" Bore, 6" Stroke															
GM2120	-	231	1000/2400	955/2400	1440	56-29/32	48-13/16	16:11	8.7:1	6.5:1	87	-	-	-	
												Total 2120 -	Zero		
2160 - Tornado - 42 Cylinder Liquid Cooled Radial - 4.25" Bore, 3.75" Stroke															
Tornado 617	R-2160-1	617	2350/4150	2000/3800	4140 *	97.5	37	.222:1	4.20:1	7.0:1	100	-	-	-	Hughes D-2
Tornado 689	R-2160-3	689	2350/4150	2000/3800	2735	95.07	36.5	.25:1	4.20:1	7.0:1	100	-	-	-	Lockheed XP-58, MX-2
788T42AA1	R-2160-5	788	2350/4150	2000/3800	2735	95.07	36.5	.25:1	4.20:1	7.0:1	100	-	-	-	Republic XP-69
												Total 2160 -	Zero		

* Includes turbo-supercharger, intercooler, coolant radiator and coolant.

** Alternate Tornado designs included extended shaft with offset gearbox, co-axial propeller shafts, 2-speed reduction gear, 2-speed and 2 stage superchargers.

2170 - Cyclone 14 (Short Stroke) - Air Cooled Radial - 6.125" Bore, 5.25 Stroke

771C14DA1	-	771	1500/2900	1300/2500	1700	67.20	47:00	.5625	5.95:1/8.20:1	6.85:1	100	-	-	-	
778C14DA1	-	778	1500/2900	1300/2500	1805	77.20	47:00	.5625	*	6.85:1	100	-	-	-	

* Two stage. 5.95:1 single speed second stage, 5.95:1 & 8.20:1 two speed first stage.

Total 2170 - Zero

HISTORICAL ENGINE SUMMARY

(BEGINNING 1930)

WAD Model	Military Model	Model Spec. No.	Sea Level Ratings Take-Off	Sea Level Ratings Normal	Weight	Length	Diameter (Height)	Red.Gear Ratio	Superch. Ratio	Comp. Ratio	Fuel Grade (or Octane)	T.C. No.	Number Built	Production Period	Installations
R-2600	14 Cylinder Air Cooled Radial - 6.125" Bore, 6.312" Stroke - (Cyclone 14)														
GR2600A2	-	332	1550/2400	1200/2100	1935	62.06"	55"	16:9	7.4:1	7.1:1	91/96	176	-		Boeing 314, A-314
GR2600A2A	-	579	1600/2400	1350/2300	1935	62.06"	55"	16:9	7:1	6.85:1	95				Boeing 314
GR2600A5A	-	584D	1600/2400	1350/2300	1935	62.06"	55"	16:9	7:1	6.3:1	90	176			
GR2600A5B*	-	700D	1600/2400	1350/2300	1950	62.06"	55"	.5625	7.14:1/10:1	6.3:1	90				Brewster 340, Douglas DB7A, DB7B, Short Brothers - Stirling, Vultee 72, Martin M-1B78-1
GR2600B2	-	585	1700/2500	1500/2400	1965	63.10"	54.26"	.4375	7.03:1	6.9:1	95	176	8821	5/37-1/46	
GR2600B5	-	586	1700/2500	1500/2400	1980	63.10"	54.26"	.5625	7.06:1/10.02:1	6.85:1	95	176			Boeing SA-307B
709C14AC1	-	709	1600/2400	1350/2300	1935	62.06"	55"	.5625	7:1	7.1:1	122/145	176			
742C14BB1	-	742	1900/2800	1600/2400	2090	66.16"	54.08"	.4375	7.07:1	6.9:1	100/130	248			
742C14BB2	-	742	1900/2800	1600/2400	2090	66.16"	54.08"	.4375	7.07:1	6.9:1	100/130	248			
												Total:	8821	(Commercial)	
	2600-1	-	1500/2300	1125/2100	1998	65"	55"	3:2	7.4:1	6.85:1	100/130	-	1	2/37-2/37	
	2600-2	462	1500/2300	1200/2100	1875	65.38"	55	3:2	7:1	6.85:1	100	-	1	4/37-4/37	
GR2600A71	2600-3	538M	1600/2300	1280/2300	1940	65"	55"	16:9	7.14:1/10:1	6.9:1	100	-	164	4/39-2/40	Douglas A-20A, A-20E, B-23; BD-1, C-67
GR2600A39	2600-4	476	1200/2100	1500/2300	1930	62.06"	55"	16:9	7.14:1/10:1	6.85:1	100	-	3	4/38-10/38	
GR2600A79	2600-5	524F	1600/2400	1280/2300	2045	65"	55"	16:9	7.14:1/10:1*	6.85:1	100	-	3	3/40-6/40	Lockheed 29
GR2600A71	2600-6	543C	1600/2400	1350/2300	1935	62.06"	55"	16:9	7.14:1/10:1	6.85:1	100	-	55	2/39-6/40	Martin PBM-1 (2 Engines), PBM-2 (2 Engines); XPBM-1 (2 Engines)
GR2600A67B	2606-6A	678A	1600/2400	1350/2300	1970	62.06"	55"	16:9*	7.14:1/10:1	6.85:1	100	-	24	5/41-8/41	Martin PBM-2
GR2600B657-3	2600-7	657C	1700/2500	1500/2400	1965	63.1"	54.26"	16:9	7.06:1	6.85:1	100	-	217	3/40-9/41	Douglas A20, A-20D, F-3, O-53, 412
GR2600B698	2600-8	698C	1700/2600 & 2800	1500/2400	1995	64.91"	54.26"	.5625	7.06:1/10.06:1	6.9:1	100	-	11,410	4/40-5/44	Curtiss A-25, SB2C-1, SB2C1B, SB2C-2, SBN-1; Brewster SB2A-1, SB2A-2 SBA-3, SB2A; Grumman TBF-1, TBF, TBM-1; Can Car Spin 1
GR2600B698	2600-8A	698C	1700/2600	1500/2400	1995	64.91"	56.26"	.5625	7.06:1/10.06:1	6.9:1	100	-	233	2/41-9/42	Brewster XSB2A; Grumman TBF, TBF-1, XTBF-1; Curtiss SXB2C-1, SB2C-1
GR2600B655	2600-9	655C	1700/2600	1500/2400	1980	63.1"	54.26"	16:9	7.06:1/10.06:1	6.9:1	100	-	522	4/41-12/41	Curtiss Wright C46, Lockheed D-56, North American B-25, B-25A, B-25B, B-25C, B-25D
GR2600B676	2600-10	676H	1700/2600 & 2800	1500/2400	2115	74.91"	54.26"	.5625	Two Stage ***	6.9:1	100	-	9	5/41-5/42	Grumman XTBF-1, TBF, TBF-1, TBF-1B, TBF2, TBM-1, TBM-2; Consolidated PB2Y-4, XPB2Y-4
GR2600A71	2600-11	538M	1600/2300	1280/2300	1940	65"	55"	16:9	7.14:1/10:1	6.9:1	100	-	3,258	2/40-11/42	Boeing A-20C, Douglas A-20A, A-20B, A-20E, P-70, F-3, BD1, BD2
GR2600B766	2600-12	766C	1700/2800	1500/2400	1991	64.91"	54.26"	.4375	7.06:1/10.06:1	6.1:1	100	-	1,461	4/41-9/44	Martin PBM-3 (2 engines), 3C, 3R, 3S

* Military Engine for British

* Also available in single speed.
** Also available with alternates: (1) 16.7 Red. Gr. Ratio; (2) 2:1 Red. Gr. Ratio Ht. 1990 lbs. Total Dry Weight
*** Main Stage 7:1; Auxiliary Stage 5.898:1 & 8.519:1

HISTORICAL ENGINE SUMMARY

(BEGINNING 1930)

WAD Model	Military Model	Model Spec. No.	Sea Level Ratings Take-Off	Sea Level Ratings Normal	Weight	Length	Diameter (Height)	Red.Gear Ratio	Superch. Ratio	Comp. Ratio	Fuel Grade (or Octane)	T.C. No.	Number Built	Production Period	Installations
GR2600B655	2600-13	655C	1700/2600	1500/2400	2000	63.1"	54.26"	16:9	7.06:1/10.06:1	6.9:1 $625	100	-	13,494	4/41-1/44	Brewster SB2A-4, Vega O-56, P-37 Vultee A-31A, A-35, A-35A, XA-35A; Martin A-30A; North Am. B-25C, B-25D, Northrup A-35, Lockheed B-37; Short Bros, Stirling
813C14BB1	2600-14	777B	1800/2800	1600/2400	2173	77.51"	54.26"	.4375	Two Stage***	6.9:1	100	-	1	7/43-7/43	Grumman XF7F, XF7F-1
789C14BB1	2600-15	789	1800/2800	1600/2400	2045	63.1"	54.26"	16:7	7.07:1	6.9:1	100/130	-	1	6/42-6/42	Martin XB-33, B-33; Grumman XF6F-2; F7F-1
GR2600B676	2600-16	676H	1700/2600 & 2800	1500/2400	2127	74.91"	54.26"	.4375	Two Stage***	6.9:1	100	-	2	12/41-4/42	Grumman XF6F, F6F, F6F-1, F6F1-B, XF6F-1
GR2600A5B-5	2600-17A		1700/2500	1500/2400	1980	63.1"	54.26"	16:9	7.07:1	6.9:1	100/130	-	4	6/41-7/41	Curtiss C-55
GR2600A5B-5	2600-19	807	1600/2400	1350/2300	1969	62.2"	55.1"	.5625	7.14:1/10:1	6.3:1	100	-	639	7/42-12/43	Northrup (Vultee) 72, A-31; Vega B-37 Martin A-30 Vultee A-31, -31A, 31C, A-35, A-35A
776C14BB1	2600-20	N776B	1900/2800	1600/2400	2045	66.08"	54.08"	.5625	7.06:1/10.06:1	6.9:1	100	-	14,620	2/43-10/45	Eastern TBM-3, Grumman TBF-3, Curtiss Columbus SB2C-3, -4, Canadian Fairchild SBF-2 Can Car SBW-2, -2B
776C14BB4	2600-22	N776B	1900/2800	1600/2400	2056	66.08"	54.08"	.4375	7.06:1/10.06:1	6.9:1	100	-	880	3/43-7/44	Martin PBM-3D
GR2600A5B-0	2600-23	807	1600/2400	1350/2300	1969	58.32"	55.1"	.5625	7.14:1/10:1	6.3:1	100	-	10,342	3/42-11/44	Douglas A-20C, DB7B, BB7C; Boeing DB7B
GR2600B655	2600-29	655C	1700/2800	1500/2400	2000	63.1"	54.26"	16:9	7.06:1/10.06:1	6.9:1	100	-	18,784	6/43-7/45	Douglas A-20H, North Am B-25G, -25H, -25J, -PBJ-1H
GR2600B655	2600-31	655C	1700/2600	1500/2400	2000	63.1"	54.26"	16:9	7.06:1/10.06:1	6.9:1	100	-	360	8/43-4/45	British M-33C
											Total:		76,488	(military)	
														Total C14 -	85,309

*** Main Stage 7:1; Auxiliary Stage 5.898:1 & 8.519:1

HISTORICAL ENGINE SUMMARY

(BEGINNING 1930)

WAD Model	Military Model	Model Spec. No.	Sea Level Ratings Take-Off	Sea Level Ratings Normal	Weight	Length	Diameter (Height)	Red.Gear Ratio	Superch. Ratio	Comp. Ratio	Fuel Grade (or Octane)	T.C. No.	Number Built	Production Period	Installations
R-3350 18 Cylinder Air Cooled Radial 6.125" Bore 6.312" Stroke															
739C18BA2	-	739E	2200/2800	2000/2400	2595	76.26"	55.78"	.4375:1	6.06:1	6.5:1	100/130	218	232	9/45-6/46	Lockheed 49
745C18BA1	-	745	2200/2800	2000/2400	2628	76.26"	55.78"	.4375:1	6.06:1	6.5:1	100/130	218	149	10/45-1/46	Lockheed 49
745C18BA3	-	745C	2200/2800	2000/2400	2842	76.13"	55.78"	.4375:1	5.46:1/8.67:1	6.5:1	100/130	218	41	6/46	Lockheed 49, 149
745C18BD1	-	749E	2500/2800	2100/2400	2915	78.52"	55.62"	.4375:1	6.46:1/8.67:1	6.5:1	100/130	218	939	2/46-10/52	Lockheed 649, 749, C-121A, EC-121B
956C18CA1	-	956F	2700/2900	2300/2600	2962	78.47"	55.62"	.4375:1	6.46:1/8.67:1	6.7:1	115/145	270	83	11/50-4/52	Lockheed 1049
975C18CB1	-	975	2800/2900	2400/2600	3065	78.47"	56.59"	.4375:1	6.46:1/8.67:1	6.7:1	115/145	270	64	1/52-11/52	Lockheed 1049
972TC18DA1	-	972G	3250/2900	2600/2600	3581	89.53"	56.59"	.4375:1	6.46:1/8.67:1	6.7:1	115/145	272	596	1/52-2/55	Lockheed 1049B (R7V-1), 1049C, D, E, F (C121C)
972TC18DA2	-	972G	3250/2900	2600/2600	3573	89.53"	56.59"	.4375:1	6.46:1/8.67:1	6.7:1	115/145	272	374	8/52-12/54	Douglas DC7
972TC18DA3	-	972G	3250/2900	2700/2600	3604	89.53"	56.59"	.4375:1	6.46:1/8.67:1	6.7:1	115/145	272	614	10/54-8/58	Lockheed 1049B, C, G, H
972TC18DA4	-	972G	3250/2900	2700/2600	3596	89.53"	56.59"	.4375:1	6.46:1/8.67:1	6.7:1	115/145	272	642	11/54-1/58	Douglas DC7
988TC18EA1	-	988G	3400/2900	2800/2600	3645	89.53"	56.59"	.4375:1	6.46:1/8.67:1	6.7:1	115/145	287	903	10/55-9/58	Douglas DC7-B, -C
988TC18EA2	-	988G	3400/2900	2800/2600	3745	89.53"	56.59"	.355:1	6.46:1/8.67:1	6.7:1	115/145	287	283	6/56-11/58	Lockheed 1649A
988TC18EA3	-	988G	3400/2900	2800/2600	3645	89.53"	56.59"	.4375:1	6.46:1/8.67:1	6.7:1	115/145	287	294	1/56-7/58	Lockheed 1049C,D,G,H
988TC18EA4	-	988G	3400/2900	2800/2600	3675	89.53"	56.59"	.4375:1	6.46:1/8.67:1	6.7:1	115/145	287	159	9/57-7/58	Douglas DC7-B,-C
988TC18EA6	-	988G	3400/ 900	2800/2600	3675	89.53"	56.59"	.4375:1	6.46:1/8.67:1	6.7:1	115/145	287	80	12/57-12/58	Lockheed 1049C,D,G,H
981TC18EA1	-	981	3700/2900	2800/2600	3651	89.53"	56.59"	.4375:1	6.46:1/8.67:1	6.7:1	115/145	287	203	1/56-4/59	Canadair CL-28
											Total C18 Commercial:		5,656		
GR3350A33	3350-1	-	1800/2200	1410/2100	2500	71.50"	55.14"	2:1	6.41:1/8.86:1	6.8:1	100/130	-	2	3/38-4/38	
GR3350	3350-2	474C	1800/2200	1500/2100	2500	77-1/4"	54"	2:1	6.41:1	6.8:1	100	-	1	4/38-4/38	
GR3350A677	3350-4	N677A	2000/2400	1700/2300	2450	71.5"	55.12"	16:7	6.41:1/8.86:1	6.85:1	100	-	7	5/39-11/40	Consolidated XPB3Y-1, XP4Y-1, Martin XPB2M-1, (4 Engines)
GR3350A77	3350-5	656	2000/2400	1620/2300	2450	71.5"	55.12"	16:7	6.41:1/8.86:1	6.85:1	100	-	7	7/39-8/41	Douglas XB-19
779C18BB1	3350-8	N779F	2400/2600	2100/2400	2796	77.8"	54.12"	.4375:1	6.46:1/8.67:1	6.5:1	100/130	-	4	12/41-8/42	Douglas B-19, SB2D-1, XSB2D-1; Curtiss XSB3C-1, SB3C-1, Boeing PBB-1, XPBB-1; Martin PBM-4, PBM-4B; Consolidated XP4Y-1, Vega XP2V1
812C18BB1	3350-10	N812	2300/2800 2250/2600	2100/2400	2595	78.35"	54.13"	.4375:1	6.06:1	6.7:1	100	-	2	2/43-5/43	Boeing XPBB-1
670C18H1	3350-13	670J	2200/2800	2000/2400	2668	76.26"	55.78"	.35:1	6.06:1	6.85:1	100	-	50	1/42-7/43	Boeing XB-29, B-29, YB-29, Consolidated XB-32 YB-32, B-32, SB-32
779C18BB2	3350-14	N779F	2300/2800	2100/2400	2731	77.8"	54.12"	.5625:1	6.06:1	6.5:1	100/130	-	2	1/41-3/41	Douglas XSB2D-1, SB2D-1, B7D-1
798C18BB1	3350-16	798B	2300/2800	2100/2400	2745	100.12"	54.13"	.4516:1	6.06:1	6.7:1	100	-	1	4/42-4/44	Curtiss XF14C-1
784C18BB1	3350-17	784A	2300/2800	2100/2400	2745	100.12"	54.26"	.35:1	6.09:1	6.7:1	100	-	1	3/43-3/43	Curtiss XP-62, P-62, XF14C-1
711C18BA3	3350-18	711	2200/2600	2000/2400	2632	78.35"	55.12"	.4375:1	6.08:1/8.52:1	6.85:1	100	-	12	12/42-5/43	Martin XPB2M-1R
787C18BA1	3350-19	787C	2200/2800	2000/2400	2757	76.26"	55.78"	.35:1	6.06:1	6.85:1	100/130	-	31	12/42-9/44	Boeing B-29
670C18BA2	3350-21	670J	2200/2800	2000/2400	2668	76.26"	55.78"	.35:1	6.06:1	6.85:1	100	-	147	11/42-4/44	Boeing B-29, XB-29, YB-29, C-97; Consolidated XB32, YB32
670C18BA3	3350-23	670J	2200/2800	2000/2400	2646	76.26"	55.78"	.35:1	6.06:1	6.85:1	100	-	1265	2/43-3/44	Boeing B-29; Consolidated YB-32, B-82

HISTORICAL ENGINE SUMMARY

(BEGINNING 1930)

WAD Model	Military Model	Model Spec. No.	Sea Level Ratings Take-Off	Sea Level Ratings Normal	Weight	Length	Diameter (Height)	Red.Gear Ratio	Superch. Ratio	Comp. Ratio	Fuel Grade (or Octane)	T.C. No.	Number Built	Production Period	Installations
670C18BA4	3350-23A	670J	2200/2800	2000/2400	2646	76.26"	55.78"	.35:1	6.06:1	6.85:1	100	-	22,486*	1/44-9/45	Boeing B-29, C-97, Consolidated-Vultee B-32
825C18BD1	R3350-24W	N825	2500/2900	2100/2400	2822	80.58"	54.13"	.4375:1	6.46:1/8.67:1	6.5:1	100/130	-	694	4/45-1/48	Lockheed P2V-2, Curtiss-Columbus XBT2C Douglas XBT2D-1 Douglas AD-1
836C18CA1	R3350-26W	836	2700/2900	2100/2400	2822	80.58"	54.13"	.4375:1	6.46:1/8.67:1	6.7:1	115/145	-	304	1/47-6/48	Grumman XTBJF, Lockheed P2V-3, Douglas AD-2
836C18CA1	R3350-26WA	836E	2700/2900	2300/2600	2848	80.81"	55.62"	.4375:1	6.46:1/8.67:1	6.7:1	115/145	-	3,446*	7/48-11/56	Douglas AD-2, 3, 4, 5, 6 Martin M270
836C18CA2	R3350-26WB	836E	2700/2900	2300/2600	2953	81.23"	55.62"	.4375:1	6.46:1/8.67:1	6.7:1	115/145	-			Douglas AD-7
856C18DA1	R3350-30W	856	3250/2900	2600/2600	3408	91.80"	56.59"	.4375:1	6.46:1/8.67:1	6.7:1	115/145	-	559	3/50-12/51	
856TC18DB1	R3350-30WA	856C	3500/2900	2600/2600	3520	91.8"	56.59"	.4375:1	6.46:1/8.67:1	6.7:1	115/145	-	1,348	11/51-3/54	Lockheed P2V4, 5, 6
- -	R3350-30WB	-	3500/2900	2600/2600	3520	91.8"	56.59"	.4375:1	6.46:1/8.67:1	6.7:1	115/145	-	61	9/52-4/53	Lockheed P2V5
878TC18EA1	R3350-32W	878D	3700/2900	2800/2600	3560	91.8"	56.59"	.4375:1	6.46:1/8.67:1	6.7:1	115/145	-	1,316	8/53-1961	Lockheed P2V-7, Martin P5M-2
861C18CA2	-	861B	2700/2900	2300/2600	2980	78.54"	55.62"	.4375:1	6.46:1	6.7:1	115/145	-	32	3/50-1/51	Boeing B-29
872TC18DA1	3350-34	872	3250/2900	2600/2600	3641	89.53"	56.59"	.4375:1	6.46:1/8.67:1	6.7:1	115/145	-	1,640	6/52-9/57	WV-2, WV-3, C1216
711C18BA2	3350-35	711H	2200/2800	2000/2400	2707	76.26"	55.78"	.4375:1	6.61:1/8.81:1	6.85:1	100/130	-	58	8/42-10/44	Lockheed C-69, Model 49
711C18BA4	3350-35A	711H	2200/2800	2000/2400	2663**	76.26"	55.78"	.4375:1	6.06:1	6.85:1	100/130	-	181	10/44-9/45	Lockheed C-69
670C18BA2	3350-37	-	2200/2800	2000/2400	2670	76.26"	55.12"	16:7	6.06:1	6.85:1	100/130	-	6	8/42-9/45	Vultee YA-31C
787C18BA	3350-39	-	2200/2800	2000/2400	2670	76.26"	55.12"	16:7	6.06:1	6.85:1	100/130	-	1	3/43-3/43	
787C18BA3	3350-41	787C	2200/2800	2000/2400	2725	76.26"	55.78"	.35:1	6.06:1	6.85:1	100/130	-	26	1/43-8/44	Boeing B-29
802C18BB1	3350-43	802	2200/2800	2100/2400	2610	78.35"	54.12"	16:7	6.09:1/8.52:1	6.7:1	100/130	-	8	10/43-11/44	Beech XA-38
787C18BA6	3350-57	787C	2200/2800	2000/2400	2758	76.26"	55.78"	.35:1	6.06:1	6.85:1	100/130	-	6,958*	1/44-11/45	Boeing B-29, Consolidated Vultee B-32
787C18BA6	3350-57A	787	2200/2800	2000/2400	2757	76.26"	55.12"	.35:1	6.06:1	6.85:1	100/130	-	407*	1/45-9/45	Boeing B-29
787C18BA7	3350-59	787C	2200/2800	2000/2400	2726	76.26"	55.78"	.35:1	6.06:1	6.85:1	100/130	-	376	10/44-6/45	Boeing B-29
787C18BC5	B3350-65	B24A	2500/2800	2100/2400	2856	75.80"	55.78"	.35:1	6.61:1	6.85:1	100/130	-	8	3/46-9/46	Boeing B-29
744C18BD1	R3350-75	749	2500/2800	2100/2400	2915	78.52"	55.62"	.4375:1	6.46:1/8.67:1	6.5:1	100/130	-	9	12/48-1/49	Lockheed C121A, BC121B
744C18DD1	YR3350-75	749	2500/2800	2100/2400	2915	78.52"	55.62"	.4375:1	6.46:1/8.67:1	6.5:1	100/130	-	15	11/49-4/50	Lockheed C121A, BC121B
858C18DA1	R3350-77	858	3250/2900	2600/2600	3528	91.80"	56.59"	.4375:1	6.46:1/8.67:1	6.7:1	All Grades	-	1	4/50	
868TC18DB1	R3350-85	868	3500/2900	2600/2600	3472	90.80"	56.59"	.4375:1	6.46:1/8.67:1	6.7:1	115/145	-	2,395*	9/51-1954	Fairchild C119
868TC18DB2	R3350-89	868	3500/2900	2600/2600	3472	90.80"	56.59"	.4375:1	6.46:1/8.67:1	6.7:1	115/145	-	24	1/55-3/55	Fairchild C119
923TC18DA2	R3350-91	923B	3250/2900	2600/2600	3690	89.53"	56.59"	.4375:1	6.46:1/8.67:1	6.7:1	115/145	-	4653	5/55-8/56	Lockheed C121

Total: 44,536

Total C18, TC18: 50,192

* Includes licensee production.

** Without two-speed supercharger.

XR4090 Cyclone C22 22 Cylinder Double Row Air Cooled 6.125" Bore 6.312" Stroke

790C22AA1		790A	3000/2800	2400/2600	3230	91.0"	58.0"	.333	5:1	6.85:1	100	-	-	-	

TURBO-JETS; RAM JETS, TURBO PROPS

(PRODUCTION)

WAD Model	Military Model	Model Spec.	Sea Level Ratings Max.	Normal	Weight (Dry)	Length	Diameter	Air Flow Lb/Sec.	Installation	Fuel	No. Built	Production Period
870TJ31A1	YJ65W1	870B	7220/8300	6400/8000	2595	115	37.5	117	Republic F-84F	JP-4	292	4-52 to 11-53
902TJ31AA1	YJ65W1A	902	7220/8300	6400/8000	2595	115	37.5	117	Republic F-84F		41.9	5-53 to 4-54
879TJ31AA1	YJ65W2	879	7220/8300	6350/8000	2735	108	37.5	117	Douglas A4D-1,NAA FJ-3	JP-4	23	8-53 to 4-54
884TJ31AA1	YJ65W3	884C	7220/8300	6350/8000	2785	115	37.5	117	Republic F-84F, RF-84F	JP-4	3343 *	3-54 to 1955
890TJ31BA1	J65W4	N890A	7700/8300	6780/8030	2750	108	37.5	125	Douglas A4D-1 NAA FJ3	JP-4	484	1-55 to 10-55
-	YJ65W4	N890A	7700/8300	6780/8030	2750	108	37.5	125	Douglas A4D-1 NAA FJ3	JP-4	119	6-54 to 9-54
-	J65W4A	N890A	7700/8300	6780/8030	2750	108	37.5	125	Douglas A4D-1 NAA FJ3	JP-4	195	10-54 to 2-55
890TJ31BA1	J65W4B	N890A	7700/8300	6780/8070	2750	108	37.5	125	NAA FJ4	JP-4	188	12-55 to 5-56
881TJ31AA1	J65W5	881A	7220/8300	6350/8000	2750	110	37.5	117	Martin B-59A/B, RB-57A	JP-4	1126	7-53 to 8-56
898TJ31BB1	J65W6	N898	11000/8300	6660/8000	3485	184	37.5	125	Grumman F9F (Test) LAC XF10U, CVA SSM-N-9	JP-4	3	3-55 to 4-55
898TJ31BB1	XS65W6	N898	11000/8300	6660/8000	3485	184	37.5	125		JP-4	16	9-55 to 12-55
892TJ31BA1	J65W7	892E	7800/8300	6870/8000	2795	114.83	37.5	125	Republic F84F, RF84F	JP-4	2192 *	4-54 to 7-56
917TJ31BB1	YJ65W14	N917A	10000/8300	6470/8000	3535	181.14	37.5	125	Grumman F11 F-1	JP-4	12	2-55 to 9-55
880TJ31BA3	J65W16	N890A	7700/8300	6780/8030	2742	112.9	37.5	125	NAA FJ-3, FJ-4	JP-4	55	6-55 to 10-55
890TJ31BA3	J65W16A	N890C	7700/8300	6780/8030	2742	112.9	37.5	125	NAA FJ-3, FJ-4	JP-4	1288	12-55 to 12-58
927TJ31BB1	YJ65W18	N927	10500/8300	6470/8030	3485	181.14	37.5	125		JP-4	47	2-56 to 6-56
927TJ31BB1	J65W18	N927C	10500/8300	6470/8030	3485	181.14	37.5	125	Grumman F 11F-1 Chance-Vought Regulus	JP-4	221	3-56 to 10-57
										Total	10,023	

* Includes Licensee Production

880TJ32CB1	YJ67W1	880A	21500/6175	11700/6175	5100	250.3"	45"	225		JP-4	13	7-55 to 9-56
	48" Ram Jet											
901WRJ48AB1	XRJ47W5	901C	12095 at 45000 ft. at 2.75 Mo		994		48" Dia.	235	Navajo(SM-64)	JP-5	23	4-56 to 11-56
924WRJ48AB1	XRJ47W9	924	9684 at 50,000 ft. at 2.75 Mo		985		48" Dia.	185	Navajo (SM-64)	JP-5	36	8-56 to 3-57

	Turbo Prop		RPM	PROP. SH. HP.	Jet TH	Weight						
875TP51AA1	YT49W1	875E	8000	9000	3430	4466		107	B-47	JP-4	13	8-53 to 9-55

Turbo Superchargers

WAD Model	Military Model	Model Spec.	Ratings Air Flow # Sec.	RPM	Outlet Pressure "Hg	Altitude	Weight	No Built	Production Period	Installation
800TSBA1	WT9-2	800	147	23000	31.67	26800	108	997	1942-1945	Curtiss X SC-1, SC-1
800TSBA2	WT9-4	800	147	24000	31.67	26800	108	8	1942-1944	Eastern XF-2M-1
822TSBC1	WT10-2	822	168	24000	31.67	28100	108	-	-	
822TSBC2	WT10-4	822	168	24000	31.67	28100	108	-	-	

TURBOJETS, TURBOPROPS, RAMJETS

(DEVELOPMENT ONLY)

Type	WAD Model	Military Model	Ratings Max.	Ratings Normal	Weight	Description	Date
Turbojet	TJA1	XJ51-W-1	6000/8100	-	2800	Single Spool, axial flow, variable nozzle Design only	1945-46
Turbojet	TJ7	XJ59-W-1	12000/6000	-	3300	Two spool, axial flow, concentric shaft - rig tests only	1949
Turbojet	TJ6	XJ61-W-1	11000/6600	-	3000	Two spool, axial flow, concentric shaft - rig tests only	1948
Turbojet	862TJ14A1	XJ59-W-3	12000/6600	10000/6600	3875	Two spool, axial flow, concentric shaft - rig tests only	1949
Turbojet	TJ37A1	-	4850/9900	4130/9400	990	Single spool, axial flow, (Bristol Orpheus)	1957-58
Turbojet	TJ38A1	-	12500/6375	12500/6375	3946	Two spool, axial flow, concentric shaft (Bristol Olympus)	1957-58
Dual Cycle	922DC32AA1	YJ67-3/XRJ55W-1	22100/6350	12150/6350	7886	Two spool, axial flow turbojet with afterburner-Ramjet (Turbojet Bypassed)	1955-1957
Turboprop	851GTAB1	XT35-W-3	8900 HP/7200	7500 HP/7080	5950	Single spool with 3 stage centrifugal compressor- some full scale testing	1945-48
Turboprop	876TP51CA1	YT47-W-1	11400/7700	10000/7500	4832	Two spool, concentric shaft, axial flow Design only	

WAD Model	Cooling Medium	Rating	Fuel
Rotating Combustion Engines *			
RC1-60	Liquid	90-125/5000	Gasoline
RC2-60	Liquid	180-250/5000	Gasoline
RC4-60	Liquid	360-500/5000	Gasoline
RC1-1920	Liquid	900-1125/1580	Gasoline
RC2-8.6	Liquid	50-70/12000	Gasoline
RC1-60	Liquid	60-90/5000	MultiFuel
RC1-60	Air	110-140/6000	Gasoline
RC1-4.3	Air	3/3600	Gasoline

This list represents Rotating Combustion engines which have been designed, built, and tested at WAD through various stages of development. Power ratings are shown as ranges of power to encompass the potential levels of ratings for a given engine size as appropriate to the various industrial, automotive, aircraft, and other applications.

* Engines listed are typical test engines only. Designs have been completed on a variety of engines of higher and lower rating over a displacement range from 4.3 to 90 cubic inches and having industrial, automotive, and aircraft applications.

DIESEL ENGINES - 12 CYLINDER VEE, LIQUID COOLED, 5-3/8" BORE, 6-1/4" Stroke

Model	Rating		* Basic Weight	Length	Width	Height	Fuel		No. Built	Production Period
12V142A-D	900 Hp/2300		3700	78	45.2	54.4	Diesel #1 or #2	For MG 3- 250 KW	18	1960-61
12V142A-2	250 KW/1800						Diesel #1 or #2	Marine Generator Set	2	1961-62
12V142B-4	1050KW/1800	(LH Rotation)					Diesel #1 or #2	(for dual MG-6 1050 KW	1	
12V142B-5		(RH Rotation)					Diesel #1 or #2	Marine Generator Set)		1962-63

* Weight and dimensions shown are for a single basic engine only.