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203-13
June 1943

Sample Report
File

M1091-1

EE-393

TACTICAL PLANNING
CHARACTERISTICS & PERFORMANCE CHART



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PUBLISHED BY AUTHORITY OF THE COMMANDING GENERAL,
ARMY AIR FORCES, BY THE CHIEF, ENGINEERING DIVISION,
MATERIEL COMMAND, WRIGHT FIELD, DAYTON, OHIO

JUNE 8, 1943.

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PAGE I

FORWARD

EE-393

This chart has been prepared as a preliminary sample in accordance with instructions from Asst. Chief of Air Staff M M & D to furnish practical data on service aircraft for tactical planning purposes. This sample chart covers selected Fighter models only, other tactical types will be covered on first monthly revision. It is not planned to cover models restricted to domestic use ("R" designation.) These data have been derived from information in Pilots' Handbooks published in T.O. form except where such information is obviously inconsistent or questionable. Red print is used to indicate estimated, calculated or preliminary data subject to revision after flight check.

Weights and performance data are conservative averages adjusted for service allowances. Due to modifications, service changes, age and condition of service equipment and flight technique any particular airplane may vary appreciably from tabulated values. Experience has indicated that with notable exceptions these variations amount to 10% in weight, 25% in take-off and landing, 5% in speed, 10% in rate of climb, 10% in endurance and 25% in range.

Since it is impractical to show individually the effect of all variables, the following allowances are made; optimum take-off and landing distances increased by 25%; speed and climb with available power of the engine as installed; range and endurance with allowance for warm up, take-off climb and unusable (residual) fuel as well as 10% additional reduction in range for incidentals. No allowance in range has been made for wind, reserve fuel or formation flying which are functions of each particular mission.

CAUTION: The lower half of the chart performance is composed of three individual tables separated by heavy lines. Only entries within each table are directly related.

Comments and criticisms should be addressed Commanding General, Materiel Command, Wright Field, Dayton, Ohio, Attention: Chief, Technical Data Laboratory.

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TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART															PAGE NO. 1
CONFIDENTIAL															DATE JUNE 8, 1943.
MODEL & BLOCK NO.	ENGINE & PROP.			SIZE	WEIGHT	COMBAT USE	FUEL		ARMAMENT			BOMBS-CARGO-PASS		RADIO	REMARKS & REFERENCE
	ENGINE MFR. MODEL SUPERCHARGER PROP. MFR. TYPE	B.H.P./ALT.	T-TAKE-OFF M-MILITARY C-CONTINUOUS				S-SPAN L-LENGTH H-HEIGHT T-TREAD W-WING AREA	B-BASIC C-COMBAT R-RECD. LIM. W-WAR MAX.	TANK TYPE OR LOCATION	NO TANKS & CAPACITY (U.S. GAL.)	NO GUNS & CALIBER	R.D.S. PER GUN	LOCATION & TYPE		
P-38E	2	ALLISON W-1710-27 & 29 TURBO CURTISS 11 1/4" Maj. 3bl. P.F., electromagnetic	T 1150/ S.L. M 1150/25000 C 1000/28000	S 52' 0" L 37' 10" H 12' 10" T 16' 6" W 328 Sq. Ft.	B 12700 C 15000 R 20000	1	MAIN-WING 2 x 90 RES.-WING 2 x 60 Tot-300	4-.50 1-.02mm +150	NOSE-FIELD NOSE-ML		NO BOMBS CARRIED		SCR-153	Tech. order 01-75PB-1. * 20mm ammunition limited to 60 rounds if CHATELHAULT feed is not used.	
P-38F	2	ALLISON W-1710-49 & 53 TURBO CURTISS 11 1/4" Maj. 3bl. P.F., electromagnetic	T 1225/ S.L. M 1225/21000 C 1000/27000	S L H AS ABOVE T W	B 13000 C 15300 R 20000	1	AS ABOVE	AS ABOVE	AS ABOVE		AS ABOVE		SCR-153 or SCR-271A	Tech. order 01-75PB-1.	
P-38F SERIES (-1,-5,-13 & -15)	2	AS ABOVE	AS ABOVE	S L H AS ABOVE T W	B 13600 C 15900 R 20000	1	MAIN-WING 2 x 90 RES.-WING 2 x 60 DEP.-EXT. 2,475, 154 or 300 Tot-300	AS ABOVE	AS ABOVE		2-1000 or 2-500 or 2-325 or 2-250 or 2-100.	2000	SCR-522 or SCR-535	Tech. order 01-75PB-1.	
P-38G SERIES (-1,-3,-5,-10 & -15)	2	ALLISON W-1710-51 & 55 TURBO CURTISS 11 1/4" Maj. 3bl. P.F., electromagnetic	T 1225/ S.L. M 1225/21000 C 1100/24000	S L H AS ABOVE T W	B 13500 C 15800 R 20000	1	AS ABOVE	AS ABOVE	AS ABOVE		AS ABOVE		SCR-522 and SCR-535	Tech. order 01-75PB-1. * Being replaced by SCR-695 on P-38-15.	
P-38H-I & P-38J-I	2	ALLISON W-1710-89 & 91 TURBO CURTISS 11 1/4" Maj. 3bl. P.F., electromagnetic	T 1425/ S.L. M 1425/25000 C 1100/25000	S L H AS ABOVE T W	B 13700 C 16000 R 21000	1	AS ABOVE	AS ABOVE	AS ABOVE		2-2000 or 2-1600 or 2-1000 or 2-500 or 2-250 or 2-100.	1400	AS ABOVE	* Military rating of P-38-1 limited to 1260 HP, because of inadequate cooling. Core type intercoolers installed in P-38-1.	

PERFORMANCE																											
MODEL & BLOCK NO.	TAKE-OFF & LANDING (HARD SURFACE-NO WIND)						HIGH SPEED & CLIMB (AT NORMAL COMBAT WEIGHT)						RANGE & ENDURANCE (STATUTE AIR MILES-NO WIND-NO ALLOWANCE FOR RESERVE)										REFER. TO NOTES				
	TO CLEAR 50 FT.		GROUND RUN		WEIGHT	STD. ALT.	HIGH SPEED	RATE OF CLIMB	HIGH RATE OF CLIMB	TIME TO CLIMB	TAKE-OFF WEIGHT	BOMBS CARGO PASS	TOTAL FUEL U.S. GAL.	MAX. CONTINUOUS POWER		MAX. CRUISE POWER		LONG RANGE									
	GROSS WEIGHT	T.O. DIST.	LAND. DIST.	LANDING DIST.										MPH.	FT.	FT.	FT.	FT.	MIN.	MIN.	MIN.	MIN.		MIN.	MIN.	MIN.	MIN.
P-38E	13500 14500 15500	- 1950 2200	2650 2900 -	85 88 -	1150 1200 1350	15000	25000 20000 15000 10000 5000	390 390 365 353 340 327	2100 2300 2600 2700 2900	380 365 353 340 328	1500 1800 2100 -	11.0 8.0 6.0 4.0 2.0	15500	NORE	300	460	1.5	470	1.5	750	3.0	750	2.7	880	4.4		
P-38F	13500 15000 15800	- 2150 2300	2750 2980 -	85 90 -	1150 1280 1380	15000	SUBSTANTIALLY SAME AS P-38E				15800	NORE	300	390	1.3	410	1.3	590	2.7	680	2.4	890	4.5				
P-38F SERIES (-1,-5,-13 & -15)	13500 15000 15500 17500 19900	- 2150 2270 3040 4000	2750 2980 3090 3350 -	85 90 91 97 -	1150 1280 1620 1800 2400	15000	25000 20000 15000 10000 5000	395 390 375 351 347	2100 2300 2450 2600 2800	380 367 354 340 327	1600 1700 1950 -	12.0 8.8 6.8 4.0 1.8	19900	NORE	300	390	1.3	410	1.3	590	2.7	680	2.4	890	4.5		
P-38G SERIES & P-38H-I	SUBSTANTIALLY SAME AS P-38F-15.																										
P-38J-I	13600 15500 17500 19500 20300	- 2000 2600 3500 4000	2750 2950 3500 3900 -	86 93 100 -	1150 1300 1600 2000 -	16000	25000 20000 15000 10000 5000	400 390 375 360 345	1700 2300 2500 2600 2800	390 377 362 347 333	1500 1900 2100 -	11.5 8.5 5.9 3.7 1.8	20300	NORE	900	1300	5.0	1350	5.0	1950	9.3	1950	8.6	2200	10.0		

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
NOTES	SEE FIGURES AND PRELIMINARY SUBJECT TO REVISION AFTER FLIGHT CHECK																										



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TYPE FIGHTER MODELS P-38 SERIES SHEET OF SHEETS

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TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART

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PAGE NO. 2 DATE APR 8, 1945

MODEL & BLOCK NO.	ENGINE & PROP.		SIZE	WEIGHT	COMBAT CAPABILITY	FUEL	ARMAMENT		BOMBS-CARGO CAPACITY	RADIO	REMARKS & REFERENCE
	TYPE	HP					NO. GUNS	PER			
P-39D	1	1150/s.p.l.	34.0"	2400	1	1200	1000	1000	1000	1000	1000
P-39D-2	1	1150/s.p.l.	34.0"	2400	1	1200	1000	1000	1000	1000	1000
P-39F	1	1150/s.p.l.	34.0"	2400	1	1200	1000	1000	1000	1000	1000
P-39K-1	1	1150/s.p.l.	34.0"	2400	1	1200	1000	1000	1000	1000	1000

MODEL & BLOCK NO.	TAKE-OFF & LANDING		HIGH SPEED & CLIMB		RANGE & ENDURANCE	
	GROUND RUN	TO CLEAR 50'	CLIMB RATE	CLIMB TIME	MAX. CONTINUOUS POWER	MAX. CRUISE POWER
P-39D	1700	47	1700	1.5	1100	1100
P-39D-1	1700	47	1700	1.5	1100	1100
P-39D-2	1700	47	1700	1.5	1100	1100
P-39F	1700	47	1700	1.5	1100	1100
P-39K-1	1700	47	1700	1.5	1100	1100

PERFORMANCE

MODEL & BLOCK NO.	TAKE-OFF & LANDING		HIGH SPEED & CLIMB		RANGE & ENDURANCE	
	GROUND RUN	TO CLEAR 50'	CLIMB RATE	CLIMB TIME	MAX. CONTINUOUS POWER	MAX. CRUISE POWER
P-39D	1700	47	1700	1.5	1100	1100
P-39D-1	1700	47	1700	1.5	1100	1100
P-39D-2	1700	47	1700	1.5	1100	1100
P-39F	1700	47	1700	1.5	1100	1100
P-39K-1	1700	47	1700	1.5	1100	1100

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TYPE FIGHTER MODELS P-39 SERIES SHEET OF SHEETS

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NOTES

* 1000 pounds per gun max. used for ground strafing; 500 lbs./gun normal.

* MILITARY POWER AVAILABLE FOR 15 MINUTES.

* 1000 lbs. max. used for ground strafing; 500 lbs./gun normal.

* 1000 lbs. max. used for ground strafing; 500 lbs./gun normal.

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TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART																				PAGE NO. 2	
CONFIDENTIAL																				DATE	JUNE 8, 1943.
MODEL & BLOCK NO.	ENGINE & PROP.		SIZE	WEIGHT	COMBAT CREW	FUEL		ARMAMENT			BOMBS-CARGO-PASS			RADIO	REMARKS & REFERENCE						
	ENGINE MFR. MODEL SUPERCHARGER PROP. MFR. TYPE	B.H.P./ALT. T-TAKE-OFF M-MILITARY C-CONTINUOUS				S-SPAN L-LENGTH H-HEIGHT T-TREAD W-WING AREA	S-BASIC C-COMBAT R-REC'D LIM. W-WAR MAIL	TANK TYPE OR LOCATION	NO TANKS & CAPACITY (U.S. GAL.)	NO GUNS & CALIBER	RDS PER GUN	LOCATION & TYPE	INTERNAL NO. & SIZE OR STATION			EXTERNAL NO. & SIZE OR CAPACITY	MAX. LOAD (LB.)	TYPE			
P-39D	1	ALLISON W-1710-55 SINGLE SPD. CURTIS 10"0" Dia; 3bl. F.F., electric	T 1150/S.L. M 1150/12000 C 1000/10800	S 34'0" L 30'2" H 11'10" T 11'4" W 213 Sq. Ft.	B 7800	WING TOTALS 12-120 DROPP.-BELLY 1 x 75 Tot = 195	12-120 1 x 75	12-30 2-50 1-37mm	1000 200 30	WING - FIXED PUSHL.-FIXED PROP. HUD-MI	None	1-200 or 1-325 or 1-250 or 1-100.	500	SCB-285	Tech. order 01-110PG-1.						
P-39D-1	1	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	WING TOTALS 12-120 DROPP.-BELLY 1 x 75 or 1 x 156 Tot = 276	12-120 1 x 75	12-30 2-50 1-37mm	1000 200 60	WING - FIXED PUSHL.-FIXED PROP. HUD-MI	A S A B O V E	A S A B O V E	500	SCB-271A or SCB-522A & SCB-535A	Tech. order 01-110PG-1.						
P-39D-2	1	ALLISON W-1710-55 SINGLE SPD. CURTIS 10"0" Dia; 3bl. F.F., electric	T 1325/S.L. M 1150/12000 C 1000/10800	S L H AS ABOVE T W	B C R AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	Tech. order 01-110PG-1.						
P-39F	1	ALLISON W-1710-55 SINGLE SPD. ARMO PROTECTS 11'7" Dia; 3bl. F.F., electric	T 1150/S.L. M 1150/12000 C 1000/10800	S L H AS ABOVE T W	B C R AS ABOVE	WING TOTALS 12-120 DROPP.-BELLY 1 x 75 Tot = 195	12-120 1 x 75	12-30 2-50 1-37mm	1000 200 30	WING - FIXED PUSHL.-FIXED PROP. HUD-MI	A S A B O V E	A S A B O V E	500	SCB-285	Tech. order 01-110PG-1.						
P-39K-1	1	ALLISON W-1710-55 SINGLE SPD. ARMO PROTECTS 11'7" Dia; 3bl. F.F., electric	T 1325/S.L. M 1150/12000 C 1000/10800	S L H AS ABOVE T W	B C R AS ABOVE	WING TOTALS 12-120 DROPP.-BELLY 1 x 75 or 1 x 156 Tot = 276	12-120 1 x 75	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	500	SCB-271A or SCB-522A & SCB-535A	Tech. order 01-110PG-1.						

PERFORMANCE																								
MODEL & BLOCK NO.	TAKE-OFF & LANDING (HARD SURFACE - NO WIND)				HIGH SPEED & CLIMB (AT NORMAL COMBAT WEIGHT)				RANGE & ENDURANCE (STATUTE AIR MILES - NO WIND - NO ALLOWANCE FOR RESERVE)								REFER. TO NOTES							
	GROSS WEIGHT LB.	T.O. DIST. FT.	LAND. DIST. FT.	LAND. SPD. MPH.	T.O. DIST. FT.	LAND. DIST. FT.	STD. ALT. FT.	MIL. POWER HIGH SPEED	MIL. POWER RATE OF CLIMB	MAX. CONTIN. POWER HIGH SPEED	MIL. POWER RATE OF CLIMB	TAKE-OFF WEIGHT LB.	BOMBS CARGO PASS LB.	TOTAL FUEL U.S. GAL.	MAX. CONTINUOUS POWER AT 10000 FT.			MAX. CRUISE POWER AT 10000 FT.		LONG RANGE AT 10000 FT.				
								M.P.H. FT./MIN.	M.P.H. FT./MIN.	M.P.H. FT./MIN.				MILES HOURS	MILES HOURS	MILES HOURS	MILES HOURS	MILES HOURS						
P-39D	7500	2500	2000	87	1700	1200	7000	25000 307 400 500	20000 307 2150 350	15000 300 1750 302	10000 342 2650 502	5000 355 2550 522	11.2 12.5 14.0 14.0	None 120 500	110 280 210	1.6 1.6 1.6	550 650 800	2.5 1.7 1.5	550 400 200	2.5 1.6 1.3	- - -	810 600 460	4.7 2.9 2.6	
P-39D-1	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	8900 5000 7800 9200	None 120 500	110 280 210	1.6 1.6 1.6	550 650 800	2.5 1.7 1.5	550 400 200	2.5 1.6 1.3	- - -	1100 810 600	6.5 4.7 2.9
P-39D-2	TAKE-OFF IMPROVED LANDING AS ABOVE (SEE SCB 285)				AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE
P-39F	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE
P-39K-1	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE

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
NOTES	RED FIGURES ARE PRELIMINARY; SUBJECT TO REVISION AFTER FLIGHT CHECKS. TAKE-OFF AND LANDING DATA DEPENDENT ON QUESTIONNAIRE REPLYER'S OWN INFORMATION. * MILITARY POWER AVAILABLE FOR 15 MINUTES. * 1000 rounds per gun max. used for ground strafing; 500 rds./gun normal.																										

SHEET OF SHEETS TYPE FIGHTER MODELS P-39 SERIES



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TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART																		PAGE NO. 3	
CONFIDENTIAL																		DATE: JUNE 5, 1943.	
MODEL & BLOCK NO.	ENGINE & PROP.			SIZE			WEIGHT	3 CURRENT COORDINATES	FUEL		ARMAMENT			BOMBS-CARGO-PASS		RADIO	REMARKS & REFERENCE		
	ENGINE MFG. MODEL SUPERCHARGER PROP. MFG. TYPE	B.H.P./ALT. T-TAKE-OFF M-MILITARY C-CONTINUOUS	S-SPAN L-LENGTH H-HEIGHT T-TREAD W-WING AREA	S-BASIC C-COMBAT R-REC'D LIM. W-WAR MAL	TANK TYPE OR LOCATION	NO TANKS & CAPACITY (U.S. GAL.)			NO GUNS & CALIBER	RDS PER GUN	LOCATION & TYPE	INTERNAL NO. & SIZE OR STATION	EXTERNAL NO. & SIZE OR CAPACITY	MAX. LOAD (LB.)	TYPE				
P-39L-1	1	ALLISON W-1710-63 SINGLE SPD. CURTIS 10'0" Dia., 3bl. F.F., automatic	T 1325/ S.L. H 1150/12000 C 1000/10800	S 34'0" L 30'2" H 11'10" T 11'4" W 213 sq. ft.	B 6600 C 7700 R 9000 W -	1	WING TOTALS DRIP-BELLY 12 x 120 or 1 x 75 or 1 x 150 Tot - 276		12-30 2-50 1-37mm	* 1000 300 30	WING - FIRED HOZE - FIRED PROP. SUB-M.	500	500	500	500	SCR-271A or SCR-522A & SCR-535A	Tech. order 01-110FM-1. * 1000 rounds per gun max. used for ground strafing. 300 rds./gun normal.		
P-39M-1	1	ALLISON W-1710-63 SINGLE SPD. CURTIS 10'0" Dia., 3bl. F.F., automatic	T 1200/ S.L. H 1125/15500 C 1000/11000	S L H T W AS ABOVE	B C R W AS ABOVE	1	AS ABOVE		AS ABOVE		AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	Tech. order 01-110FM-1.		
P-39N SERIES (-0,-1,-5)	1	ALLISON W-1710-65 SINGLE SPD. ALSO PRODUCE 11'7" Dia., 3bl. F.F., hydraulic	T AS ABOVE H AS ABOVE C	S L H T W AS ABOVE	B C R W AS ABOVE	1	WING TOTALS DRIP-BELLY 8 x 97 or 1 x 175 Tot - 262		AS ABOVE		AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	SCR-271A or SCR-522A & SCR-535A	Tech. order 01-110FM-1. * SCR-695 will replace SCR-535A on the P-39M-5 series only. ** The 1st. 186 P-39M-0 have built-in fuel capacity of 120 gal. instead of 87		
P-39Q SERIES (-1,-5,-10)	1	AS ABOVE	T AS ABOVE H AS ABOVE C	S L H T W AS ABOVE	B C R W AS ABOVE	1	SEE REMARKS		2-50 2-50 1-37mm	500 300 30	WING - FIRED HOZE - FIRED PROP. SUB-M.	500	500	500	500	SCR-271A or SCR-522A & SCR-535A or SCR-695	Tech. order 01-110FM-1. * P-39Q-1 built-in fuel capacity 87 gal. Q-54Q-10 built-in fuel capacity 110 gal.		

PERFORMANCE																											
MODEL & BLOCK NO.	TAKE-OFF & LANDING (HARD SURFACE - NO WIND)						HIGH SPEED & CLIMB (AT NORMAL COMBAT WEIGHT)						RANGE & ENDURANCE (STATUTE AIR MILES - NO WIND - NO ALLOWANCE FOR RESERVE)										REFER. TO NOTES				
	TO CLEAR 50'		TO LAND		GROUND RUN		STD. ALT.	MIL. POWER		MAX. CONTIN. POWER		TAKE-OFF WEIGHT	BOMBS CARGO PASS.	TOTAL FUEL U.S. GAL.	MAX. CONTINUOUS POWER		MAX. CRUISE POWER		LONG RANGE								
	T.O. DIST.	LAND. DIST.	T.O. DIST.	LAND. DIST.	FT.	FT.		FT.	FT.	M.P.H.	FT./MIN.				M.P.H.	FT./MIN.	MIN.	AT 10000 FT.	AT 25000 FT.	AT 10000 FT.	AT 25000 FT.	AT 10000 FT.		AT 25000 FT.			
P-39L-1	(SEE FOOTNOTE)						7700	25000	362	600	599	11.8	3700	NONE	276	550	2.1	-	-	750	3.1	-	-	1100	6.5		
P-39M-1	AS ABOVE						7700	25000	362	500	336	15.0	5200	NONE	195	570	1.5	570	6.5	550	2.3	-	-	900	5.7		
P-39N SERIES (-0,-1,-5)	AS ABOVE						7100	25000	568	1250	350	10.8	6600	NONE	262	-	-	-	-	-	-	-	-	1000	5.1		
P-39Q-1	AS ABOVE													NONE	87	150	0.5	280	1.0	-	-	-	-	350	1.7		
P-39Q-5 & -10	AS ABOVE													NONE	110	180	0.9	350	1.1	-	-	-	-	400	2.1		

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
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NOTES: FIGURES ARE PRELIMINARY; SUBJECT TO REVISION AFTER FLIGHT TESTS. TAKE-OFF AND LANDING DATA IN T.O. & L. IS INDICATIVE AND COMPLETE REVISION IS NOT UNUSUAL. * MILITARY POWER AVAILABLE FOR 15 MINUTES.

TYPE FIGHTER MODELS P-39 SERIES SHEET OF SHEETS


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TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART																				PAGE NO. 4	
CONFIDENTIAL																				DATE	JUNE 6, 1945
MODEL & BLOCK NO.	ENGINE & PROP.		SIZE	WEIGHT	COMBAT USE	FUEL		ARMAMENT			BOMBS-CARGO-PASS		RADIO	REMARKS & REFERENCE							
	NUMBER	ENGINE MFGR. MODEL SUPERCHARGER PROP. MFGR. TYPE				B.M.P./ALT. T-TAKE-OFF M-MILITARY C-CONTINUOUS	S-SPAN L-LENGTH H-HEIGHT T-TREAD W-WING AREA	B-BASIC C-COMBAT R-REC'D. LIM. W-WAR MAX	TANK TYPE OR LOCATION	NO TANKS & CAPACITY (U.S. GAL.)	NO GUNS & PER CALIBER	R.D.S. PER GUN			LOCATION & TYPE	INTERNAL NO. & SIZE OR STATION	EXTERNAL NO. & SIZE OR CAPACITY	MAX. LOAD (Lb.)	TYPE		
P-40E & E-1	1	ALLISON V-1710-39 SINGLE SP4 CURTIS 11'0" (dia.) 3bl. P.F., electromagnetic PACKARD	T 1150/8.1. M 1150/11700 C 1000/10800	S 37'4" L 31'0" H 12'4" T 8'2" W 236 sq. ft.	B 6900 C 6400 R 10000 W 12000	1	FUSELAGE 1 x 62 MAIN-WING 1 x 51 RES.-WING 1 x 37 PROP.-BELLY 1 x 52 Tot-200	6-.50	280 (average)	WING - FIXED	NONE	1-500 & 6-20. 1-325 or 1-150 or 1-100.	620	SCR-283 or SCR-271AN	Tech. order 01-2508-1. P-40E-1 does not carry 6-20's external wing bombs.						
P-40F SERIES (-1, -5, -10, -15 & -20)	1	ALLISON V-1650-1 SINGLE ST2 SP4 CURTIS 11'0" (dia.) 3bl. P.F., electromagnetic PACKARD	T 1300/8.1. M 1240/11500 C 1080/9500	S 37'4" L 33'4" H 12'4" T 8'2" W 236 sq. ft.	B 7000 C 6500 R 10000 W 12000	1	FUSELAGE 1 x 65 MAIN-WING 1 x 54 RES.-WING 1 x 37 PROP.-BELLY 1 x 52, 75, 150 or 170 Tot-150	A 3	A B O V E	WING - FIXED	NONE	1-500 & 2-100 or 6-20. 1-325 or 1-250 or 1-100.	700	SCR-271AN SCR-242A or SCR-239A	Tech. order 01-2508-1. P-40F-1 fuselage length is 31'9". Other models have extended fuselage.						
P-40K SERIES (-1, -5, -10 & -15)	1	ALLISON V-1710-73 SINGLE SP4 CURTIS 11'0" (dia.) 3bl. P.F., electromagnetic PACKARD	T 1325/8.1. M 1150/11800 C 1000/11000	S 37'4" L 33'4" H 12'4" T 8'2" W 236 sq. ft.	B 6950 C 6400 R 10000 W 12000	1	FUSELAGE 1 x 65 MAIN-WING 1 x 54 RES.-WING 1 x 37 PROP.-BELLY 1 x 52, 75, 150 or 170 Tot-150	A 3	A B O V E	WING - FIXED	NONE	1-500 & 2-100 or 6-20. 1-325 or 1-250 or 1-100.	700	SCR-271AN SCR-242A or SCR-239A	Tech. order 01-2508-1. P-40K-1 and E-1 fuselage length is 31'9". P-40K-10 and K-15 have extended fuselage.						
P-40L SERIES (-1, -5, -10, -15 & -20)	1	ALLISON V-1650-1 SINGLE ST2 SP4 CURTIS 11'0" (dia.) 3bl. P.F., electromagnetic PACKARD	T 1300/8.1. M 1240/11500 C 1080/9500	S 37'4" L 33'4" H 12'4" T 8'2" W 236 sq. ft.	B 7000 C 6500 R 10000 W 12000	1	FUSELAGE 1 x 65 MAIN-WING 1 x 54 RES.-WING 1 x 37 PROP.-BELLY 1 x 52, 75, 150 or 170 Tot-150	6-.50	300 (average)	WING - FIXED	A 3	A B O V E	AS ABOVE	AS ABOVE	Tech. order 01-2508-1. P-40L-1 carries 6-.50 cal. guns of 280 rounds per gun and also front (reserve) wing tank of 57 gal. of gas.						
P-40M SERIES (-1, -5, -10)	1	ALLISON V-1710-41 SINGLE SP4 CURTIS 11'0" (dia.) 3bl. P.F., electromagnetic PACKARD	T 1200/8.1. M 1125/11600 C 1000/11800	S 37'4" L 33'4" H 12'4" T 8'2" W 236 sq. ft.	B 6950 C 6400 R 10000 W 12000	1	FUSELAGE 1 x 65 MAIN-WING 1 x 54 RES.-WING 1 x 37 PROP.-BELLY 1 x 52, 75, 150 or 170 Tot-150	6-.50	280 (average)	WING - FIXED	A 3	A B O V E	AS ABOVE	AS ABOVE	Tech. order 01-2508-1.						

PERFORMANCE																				
MODEL & BLOCK NO.	TAKE-OFF & LANDING (HARD SURFACE - NO WIND)					HIGH SPEED & CLIMB (AT NORMAL COMBAT WEIGHT)					RANGE & ENDURANCE (STATUTE AIR MILES - NO WIND - NO ALLOWANCE FOR RESERVE)					REFER. TO NOTES				
	GROSS WEIGHT LB.	T.O. DIST. FT.	LAND. DIST. FT.	T.O. LANDING SPEED KTS.	GROUND RUN FT.	WEIGHT LB.	STD. ALT. FT.	MIL. POWER M.P.H.	HIGH RATE CLIMB FT./MIN.	MAX. CONTIN. POWER M.P.H.	TIME OF CLIMB MIN.	TAKE-OFF WEIGHT LB.	BOMBS CARGO LB.	TOTAL FUEL U.S. GAL.	MAX. CONTINUOUS POWER AT 10000 FT. RANGE ENDR. MILES		MAX. CRUISE POWER AT 25000 FT. RANGE ENDR. MILES	MAX. CRUISE POWER AT 10000 FT. RANGE ENDR. MILES	MAX. CRUISE POWER AT 25000 FT. RANGE ENDR. MILES	LONG RANGE RANGE ENDR. MILES
P-40E & E-1	7500 6100 6700 8700 9200	1700 1300 1800 1800 1800	81 86 86 86 86	1300 1050 1150 1200 1200	1050 1150 1200 1200 1200	6400	25000	320	1450	312	18.5	9300	200	200	270	1.5	-	-	500	5.0
P-40F SERIES (-1, -5, -10, -15 & -20)	7500 8500 9500 10000 10000	1700 1850 1850 1850 1850	81 86 86 86 86	1300 1050 1150 1200 1200	1050 1150 1200 1200 1200	6500	25000	320	1450	312	18.5	9300	200	200	270	1.5	-	-	500	5.0
P-40K SERIES (-1, -5, -10 & -15)	7500 8400 8900 9300	1700 1700 1850 1850	81 86 86 86	1300 1050 1150 1200	1050 1150 1200 1200	6400	25000	320	1450	312	18.5	9300	200	200	270	1.5	-	-	500	5.0
P-40L SERIES (-1, -5, -10, -15 & -20)	7500 8400 8900 9300	1700 1700 1850 1850	81 86 86 86	1300 1050 1150 1200	1050 1150 1200 1200	6500	25000	320	1450	312	18.5	9300	200	200	270	1.5	-	-	500	5.0
P-40M SERIES (-1, -5, -10)	7500 8400 8900 9300	1700 1700 1850 1850	81 86 86 86	1300 1050 1150 1200	1050 1150 1200 1200	6400	25000	320	1450	312	18.5	9300	200	200	270	1.5	-	-	500	5.0

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
NOTES	SEE FIGURES AND FOOTNOTES. SUBJECT TO REVISIONS AFTER MILITARY CHECK.																										



TYPE FIGHTER MODELS P-40 SERIES SHEET OF SHEETS 2

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TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART

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MODEL & BLOCK NO.	ENGINE & PROP.			SIZE	WEIGHT	FUEL			ARMAMENT			BOMBS - CARROPPASS			RADIO	REMARKS & REFERENCE	
	ENGINE MFG	MODEL	PROP MFG			T-TAKE-OFF	L-LENGTH	S-PAN	B-BASIC	TANK	NO TANKS	NO GUNS	RDS	LOCATION			INTERNAL
P-40N-1	ALLEN	P-1700A	ALLEN	T 1200/5.1	57 1/2"	6100	1	1 x 55	1 x 55	1 x 55	1 x 55	1 x 55	1 x 55	1 x 55	1 x 55	1 x 55	1 x 55
P-40N-1	ALLEN	P-1700A	ALLEN	T 1200/5.1	57 1/2"	6100	1	1 x 55	1 x 55	1 x 55	1 x 55	1 x 55	1 x 55	1 x 55	1 x 55	1 x 55	1 x 55
P-40N-1	ALLEN	P-1700A	ALLEN	T 1200/5.1	57 1/2"	6100	1	1 x 55	1 x 55	1 x 55	1 x 55	1 x 55	1 x 55	1 x 55	1 x 55	1 x 55	1 x 55

MODEL & BLOCK NO.	TAKE-OFF & LANDING			HIGH SPEED & CLIMB			RANGE & ENDURANCE		
	STD. ALT.	STD. CLIMB	STD. CLIMB	MAX. CONTIN. POWER	MAX. CONTIN. POWER	MAX. CRUISE POWER	MAX. CRUISE POWER	MAX. CRUISE POWER	MAX. CRUISE POWER
P-40N-1	15000	1500	1500	1200	1200	1200	1200	1200	1200
P-40N-1	15000	1500	1500	1200	1200	1200	1200	1200	1200
P-40N-1	15000	1500	1500	1200	1200	1200	1200	1200	1200

MODEL & BLOCK NO.	TAKE-OFF & LANDING			HIGH SPEED & CLIMB			RANGE & ENDURANCE		
	STD. ALT.	STD. CLIMB	STD. CLIMB	MAX. CONTIN. POWER	MAX. CONTIN. POWER	MAX. CRUISE POWER	MAX. CRUISE POWER	MAX. CRUISE POWER	MAX. CRUISE POWER
P-40N-1	15000	1500	1500	1200	1200	1200	1200	1200	1200
P-40N-1	15000	1500	1500	1200	1200	1200	1200	1200	1200
P-40N-1	15000	1500	1500	1200	1200	1200	1200	1200	1200

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TYPE FIGHTER MODELS P-40 SERIES SHEET OF SHEETS

