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1 March

# 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

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airplanes

BOMBERS

1 March '44

CARGO

FIGHTERS

# TACTICAL PLANNING

## Characteristics & Performance Chart

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<u>CHARACTERISTICS</u>	<u>PERFORMANCE</u>
<u>SUPERCHARGER:</u> "TURBO" INDICATES EXHAUST DRIVEN TURBINE WITH SINGLE SPEED INTEGRAL DIFFUSER. .	RED PRINT: PRELIMINARY ESTIMATES OR CALCULATED DATA
<u>BHP/ALT.:</u> BRAKE HORSEPOWER PER ENGINE AT CRITICAL ALTITUDE WITH RAM.	<u>TAKE-OFF &amp; LANDING:</u> VALUES ARE AT LEAST 125% OF OPTIMUM (At 3000' RUNWAY ALT.)
<u>T:</u> MAXIMUM POWER FOR TAKE-OFF.	<u>GROSS WEIGHT:</u> ARBITRARY VALUES FOR REFERENCE ONLY TO CLEAR 50': DISTANCES REPRESENTATIVE OF MINIMUM AIR-PORT REQUIREMENTS.
<u>M:</u> MAXIMUM POWER FOR COMBAT AT ALTITUDE SHOWN, (usually limited to 15 min. duration)	<u>GROUND RUN:</u> DISTANCES REPRESENTATIVE OF MINIMUM RUN- WAY REQUIREMENTS.
<u>we:</u> WAR EMERGENCY POWER FOR COMBAT AT ALTITUDE SHOWN, (limited to 5 min. duration only)	<u>LANDING SPEED:</u> PRACTICAL MINIMUM FOR AVERAGE PILOT.
<u>C:</u> MAXIMUM POWER FOR CONTINUOUS OPERATION.	<u>HIGH SPEED &amp; CLIMB:</u> VALUES ARE FOR CLEAN NEW AIRPLANES
<u>Note:</u> Max. cruise power is the maximum power for unlimited operation with lean mixture.	<u>MILITARY POWER:</u> FOR LIMITED PERIODS OF COMBAT OPERATION (Performance with War Emergency ratings are shown when applicable)
<u>SIZE:</u> APPROX. DIMENSIONS FOR STORAGE PLANNING.	<u>WAR EMERGENCY POWER:</u> FOR UNLIMITED PERIODS OF OPERATION IN- CLUDING EMERGENCY HIGH-SPEED CRUISING.
<u>LENGTH:</u> DOES NOT INCLUDE PROTRUDING GUNS.	<u>TIME OF CLIMB:</u> MINIMUM TIME TO CLIMB FROM SEA LEVEL BASED ON MILITARY POWER CLIMB FOR ALLOWABLE TIME AND MAXIMUM CONTINUOUS POWER CLIMB FROM THEN ON.
<u>HEIGHT:</u> MAXIMUM IN THREE POINT POSITION.	<u>RANGE &amp; ENDURANCE:</u> SEE DISCUSSION IN "FOREWORD", PAGE I.
<u>WING AREA:</u> STANDARD AERODYNAMIC SURFACE AREA.	<u>TAKE-OFF WEIGHT:</u> BRIEF LIST OF TYPICAL GROSS WEIGHTS.
<u>TREAD:</u> CENTER TO CENTER MAIN WHEELS: (OUTBOARD IF DUAL).	<u>BOMBS, ETC.:</u> TYPICAL LOADINGS COMBINED WITH VARIOUS TANK CAPACITIES. NO CONSIDERATION IS GIVEN TO LOADINGS REQUIRING PARTIALLY FILLED TANKS.
<u>WEIGHTS:</u> APPROXIMATE AVERAGES FOR PLANNING PURPOSES	<u>NOTE:</u> Take-off weights with corresponding load and fuel quantity applies to all values to the right on the same line.
<u>B:</u> BASIC WEIGHT INCLUDES WEIGHT EMPTY, TRAP- PED FUEL AND OIL, EQUIPMENT, ARMAMENT, ETC. BUT DOES NOT INCLUDE DISPOSABLE FUEL, OIL, DROPPABLE TANKS, AMMUNITION, BOMBS, CARGO, OR CREW.	<u>MAX. CONT. POWER:</u> HIGH SPEED CRUISING WITH RICH MIXTURE ( For emergency cruising only )
<u>C:</u> COMBAT WEIGHT IS BASED ON LATEST INFORMA- TION FROM THEATERS AND USUALLY INCLUDES FULL BUILT-IN FUEL, FULL AMMUNITION, AND AN ARBITRARY BOMB OR CARGO LOAD.	<u>MAX. CRUISE POWER:</u> MAXIMUM CONTINUOUS OPERATION WITH LEAN MIXTURE SETTING.
<u>R:</u> RECOMMENDED LIMIT ON GROSS WEIGHT WHICH WILL ALLOW A LIMIT APPLIED POSITIVE MANEU- VER FACTOR OF AT LEAST 2.67g.	<u>LONG RANGE:</u> PRACTICAL MAXIMUM RANGE FOR PLANNING PUR- POSES UNDER ALL CONDITIONS SET FORTH.
<u>W:</u> WAR MAX. WEIGHT FOR SPECIAL MISSIONS ONLY.	
<u>FUEL:</u> STANDARD FUEL TANKAGE AND CAPACITIES.	
<u>ARMAMENT:</u> RESUME' OF INFORMATION IN THE "ARMAMENT & BOMB INSTALLATIONS" (CHART EE-306A)	
<u>BOMBS:</u> MAXIMUM RACK CAPACITY FOR STANDARD SIZES.	
<u>CARGO:</u> CARGO, PASSENGER OR TROOP CAPACITIES.	
<u>MAX. LOAD:</u> ONE SIZE ONLY ON EACH BOMB RACK (in some cases a reduction in fuel load is required) PRACTICAL TOTAL CARGO BASED ON GR. WT.	
<u>RADIO:</u> RESUME' OF TYPICAL MODELS INSTALLED.	

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BOEING (SEATTLE) "B0"

MODEL & BLOCK-NO.	ARMAMENT			BOMBS			FUEL U.S. GAL. (MAXIMUM)
	NO GUNS & CALIBER	RDS. PER GUN	LOCATION & TYPE	INTERNAL	EXTERNAL	MAX. LOAD LB.	
				NO & SIZE	NO & SIZE		
B-17F-80 (-1 thru -27)	1-.30 2-.50 2-.50 2-.50	500 a 300 400 500	NOSE...FLEX. SIDE WAIST-PL. UPPER TURRET LOW BALL TRR. TAIL...FLEX.MT.	2-2000 6-1600 6-1000 12- 500 16- 250 24- 100	NONE	9600	2550
B-17F-80 (-30 thru -50)	NONE 1) 2) 2) 2)	NONE 300 b 300 400 500 565	NOSE...FLEX. RADIO COMPART. SIDE WAIST-PL. UPPER TURRET LOW BALL TRR. TAIL...FLEX.MT.	AS ABOVE	2-4000 2-2000 2-1600 2-1000	6-1600 2-4000x	AS ABOVE
B-17F-80 -55 thru 1st.30(-85)	2) 1) 2) 2)	300 300 400 500 565	AS ABOVE	A S	A B O V E		2550 (-55 thru 1st.73-80 3630 (Last 27 -80 & SUB.)
B-17F-80 Last 70(-85) thru -130	3) 1) 2) 2)	.50 A S	A B O V E	AS ABOVE EXCEPT THAT EXTERNAL BOMB RACES DELETED AFTER 15th.(-95)			3630
B-17G-80 (-1 thru -60)	2) 2) 2) 2) 2)	300 a 365 300 500 d 400 500 565	CHEEK...FLEX. CHIN TURRET RADIO COMPART. SIDE WAIST-PL. UPPER TURRET LOW BALL TRR. TAIL...FLEX.MT.	AS ABOVE	PROVISION FOR RACES	9600	AS ABOVE

NOTES: a NOSE GUN DELETED ON LAST 35 (-27). d EARLY B-17G MODELS CARRY 300 RDS./GUN.  
b RADIO COMPART. GUN ADDED AFTER 16th.(-30).  
c CHEEK GUNS ADDED AT MOD. CENTER. x EXTERNAL

DOUGLAS (LONG BEACH) "DL"

MODEL & BLOCK-NO.	ARMAMENT			BOMBS			FUEL U.S. GAL. (MAXIMUM)
	NO GUNS & CALIBER	RDS. PER GUN	LOCATION & TYPE	INTERNAL	EXTERNAL	MAX. LOAD LB.	
				NO & SIZE	NO & SIZE		
B-17F-DL -1 thru 1st.13(-10)	1-.30 2-.50 2-.50 2-.50	500 a 300 400 500	NOSE...FLEX. SIDE WAIST-PL. UPPER TURRET LOW BALL TRR. TAIL...FLEX.MT.	2-2000 6-1600 6-1000 12- 500 16- 250 24- 100	NONE	9600	2550
B-17F-DL Last 12(-10) thru -20	2) 1) 2) 2)	300 300 400 500 565	NOSE...FLEX. RADIO COMPART. SIDE WAIST-PL. UPPER TURRET LOW BALL TRR. TAIL...FLEX.MT.	AS ABOVE	PROV. FOR EXTERNAL RACES ON -20 & SUB.	AS ABOVE	AS ABOVE
B-17F-DL -25 thru 1st.21(-35)	A S	A B O V E	AS ABOVE	AS ABOVE	PROV. FOR EXTERNAL RACES	AS ABOVE	3630
B-17F-DL Last 19(-35) thru -65	3) 1) 2) 2) 2)	.50 A S	A B O V E	A S	A B O V E		AS ABOVE
B-17G-DL (-1 thru -40)	2) 2) 2) 2) 2)	300 a 365 300 500 d 400 500 565	CHEEK...FLEX. CHIN TURRET RADIO COMPART. SIDE WAIST-PL. UPPER TURRET LOW BALL TRR. TAIL...FLEX.MT.	AS ABOVE	PROVISION FOR RACES	9600	AS ABOVE

NOTES: a NO NOSE GUN ON 1st.13(-10). d EARLY B-17G MODELS CARRY 300 RDS./GUN.  
b NOT CARRIED ON -1 & -5.  
c CHEEK GUNS ADDED AT MOD. CENTER. x EXTERNAL

VEGA (BURBANK) "VE"

MODEL & BLOCK-NO.	ARMAMENT			BOMBS			FUEL U.S. GAL. (MAXIMUM)
	NO GUNS & CALIBER	RDS. PER GUN	LOCATION & TYPE	INTERNAL	EXTERNAL	MAX. LOAD LB.	
				NO & SIZE	NO & SIZE		
B-17F-VE (-1 thru -10)	1-.30 CAL.(300 RDS.) IN 1st.	NOSE GUN		2-2000 6-1600 6-1000 12- 500 16- 250 24- 100	NONE	9600	2550
B-17F-VE (-15 & -20)	2) 1) 2) 2) 2)	300 300 400 500 565	NOSE...FLEX. RADIO COMPART. SIDE WAIST-PL. UPPER TURRET LOW BALL TRR. TAIL...FLEX.MT.	AS ABOVE	EXTERNAL RACES ON Last 31 (-20) & SUB.	AS ABOVE	AS ABOVE
B-17F-VE (-25 & -30)	A S	A B O V E	AS ABOVE	AS ABOVE	b 2-4000 2-2000 2-1600 2-1000	6-1600 2-4000x	2550 (B-17F-25) 3630 (B-17F-30)
B-17F-VE (-35 thru -50)	3) 1) 2) 2) 2)	.50 A S	A B O V E	AS ABOVE	NONE	9600	3630
B-17G-VE (-1 thru -40)	2) 2) 2) 2) 2)	300 a 365 300 500 d 400 500 565	CHEEK...FLEX. CHIN TURRET RADIO COMPART. SIDE WAIST-PL. UPPER TURRET LOW BALL TRR. TAIL...FLEX.MT.	AS ABOVE	PROVISION FOR RACES	9600	AS ABOVE

NOTES: a NOT ON B-17F-1 & -5. d EARLY B-17G MODELS CARRY 300 RDS./GUN.  
b EXTERNAL BOMB RACES DELETED ON LAST 4(-30).  
c CHEEK GUNS ADDED AT MOD. CENTER. x EXTERNAL

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BOEING (SEATTLE) "BO"

MODEL & BLOCK NO.	ARMAMENT			BOMBS			FUEL U.S. GAL. (MAXIMUM)
	NO GUNS & CALIBER	RDS. PER GUN	LOCATION & TYPE	INTERNAL	EXTERNAL	MAX. LOAD LB.	
				NO & SIZE	NO & SIZE		
B-17F-80 (-1 thru -27)	1-.30 2-.50 2-.50 2-.50	500 a 300 400 500	NOSE...FLEX. SIDE WAIST-FL. UPPER TURRET LOW BALL TRR. TAIL...FLEX.MT.	2-2000 6-1600 6-1000 12- 500 16- 250 24- 100	NONE	9600	2550
B-17F-80 (-30 thru -50)	NONE 1) 2) 2) 2)	NONE 300 b 300 400 500 565	NOSE...FLEX. RADIO COMPART. SIDE WAIST-FL. UPPER TURRET LOW BALL TRR. TAIL...FLEX.MT.	AS ABOVE	2-4000 2-2000 2-1600 2-1000	6-1600 2-4000x	AS ABOVE
B-17F-80 -55 thru 1st.30 (-85)	2) 1) 2) 2) 2)	300 300 300 400 500 565	AS ABOVE	A S	A B O V E		2550 (-55 thru 1st.73 -80 3630 (last 27 -80 & sub.
B-17F-80 Last 70 (-85) thru -130	3) 1) 2) 2) 2)	300 300 300 400 500 565	AS ABOVE	AS ABOVE EXCEPT THAT EXTERNAL BOMB RACKS DELETED AFTER 15th. (-95)			3630
B-17G-80 (-1 thru -60)	2) 2) 1) 2) 2) 2)	300 c 365 300 500 d 400 500 565	CHEEK...FLEX. CHIN TURRET RADIO COMPART. SIDE WAIST-FL. UPPER TURRET LOW BALL TRR. TAIL...FLEX.MT.	AS ABOVE	PROVISION FOR RACKS	9600	AS ABOVE

NOTES: a NOSE GUN DELETED ON LAST 35 (-27). d EARLY B-17G MODELS CARRY 300 RDS./GUN.  
b RADIO COMPART. GUN ADDED AFTER 16th. (-30).  
c CHEEK GUNS ADDED AT MOD. CENTER. x EXTERNAL

DOUGLAS (LONG BEACH) "DL"

MODEL & BLOCK NO.	ARMAMENT			BOMBS			FUEL U.S. GAL. (MAXIMUM)
	NO GUNS & CALIBER	RDS. PER GUN	LOCATION & TYPE	INTERNAL	EXTERNAL	MAX. LOAD LB.	
				NO & SIZE	NO & SIZE		
B-17F-DL -1 thru 1st.13 (-10)	1-.30 2-.50 2-.50 2-.50	500 a 300 400 500 565	NOSE...FLEX. SIDE WAIST-FL. UPPER TURRET LOW BALL TRR. TAIL...FLEX.MT.	2-2000 6-1600 6-1000 12- 500 16- 250 24- 100	NONE	9600	2550
B-17F-DL last 12 (-10) thru -20	2) 1) 2) 2) 2)	300 300 300 400 500 565	NOSE...FLEX. RADIO COMPART. SIDE WAIST-FL. UPPER TURRET LOW BALL TRR. TAIL...FLEX.MT.	AS ABOVE	PROV. FOR EXTERNAL RACKS ON -20 & SUB.		AS ABOVE
B-17F-DL -25 thru 1st.21 (-35)	A S	A B O V E	AS ABOVE	AS ABOVE	PROV. FOR EXTERNAL RACKS	AS ABOVE	3630
B-17F-DL last 19 (-35) thru -65	3) 1) 2) 2) 2)	300 300 300 400 500 565	AS ABOVE	A S	A B O V E		AS ABOVE
B-17G-DL (-1 thru -40)	2) 2) 1) 2) 2) 2)	300 c 365 300 500 d 400 500 565	CHEEK...FLEX. CHIN TURRET RADIO COMPART. SIDE WAIST-FL. UPPER TURRET LOW BALL TRR. TAIL...FLEX.MT.	AS ABOVE	AS ABOVE		AS ABOVE

NOTES: a NO NOSE GUN ON 1st.13 (-10) d EARLY B-17G MODELS CARRY 300 RDS./GUN.  
b NOT CARRIED ON -1 & -5.  
c CHEEK GUNS ADDED AT MOD. CENTER. x EXTERNAL

VEGA (BURBANK) "VE"

MODEL & BLOCK NO.	ARMAMENT			BOMBS			FUEL U.S. GAL. (MAXIMUM)
	NO GUNS & CALIBER	RDS. PER GUN	LOCATION & TYPE	INTERNAL	EXTERNAL	MAX. LOAD LB.	
				NO & SIZE	NO & SIZE		
B-17F-VE (-1 thru -10)	1-.30 CAL. (300 RDS.) IN 1st.		NOSE GUN	2-2000 6-1600 6-1000 12- 500 16- 250 24- 100	NONE	9600	2550
B-17F-VE (-15 & -20)	2) 1) 2) 2) 2) 2)	300 300 300 400 500 565	NOSE...FLEX. RADIO COMPART. SIDE WAIST-FL. UPPER TURRET LOW BALL TRR. TAIL...FLEX.MT.	AS ABOVE	EXTERNAL RACKS ON Last 31 (-20) & SUB.		AS ABOVE
B-17F-VE (-25 & -30)	A S	A B O V E	AS ABOVE	AS ABOVE	b 2-4000 2-2000 2-1600 2-1000	6-1600 2-4000x 17600	2550 (B-17F-25) 3630 (B-17F-30)
B-17F-VE (-35 thru -50)	3) 1) 2) 2) 2)	.50	A S	A B O V E	AS ABOVE	NONE	9600
B-17G-VE (-1 thru -40)	2) 2) 1) 2) 2) 2)	300 c 365 300 500 d 400 500 565	CHEEK...FLEX. CHIN TURRET RADIO COMPART. SIDE WAIST-FL. UPPER TURRET LOW BALL TRR. TAIL...FLEX.MT.	AS ABOVE	PROVISION FOR RACKS	AS ABOVE	AS ABOVE

NOTES: a NOT ON B-17F-1 & -5. d EARLY B-17G MODELS CARRIED 300 RDS./GUN.  
b EXTERNAL BOMB RACKS DELETED ON LAST 4 (-30).  
c CHEEK GUNS ADDED AT MOD. CENTER. x EXTERNAL

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**TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART**

PAGE 1  
AS OF 1  
DATE 20 FEB 1944

MODEL & BLOCK NO.	ENGINE & PROP.		SIZE		WT.	COMBAT CREW	FUEL		ARMAMENT			BOMBS-CARGO-PASS.		RADIO	REMARKS & REFERENCE
	ENGINE MFR. MODEL	B.H.P./ALT.	S-SPAN	B-BASIC	TANK		NO. TANKS	NO. GUNS	RDS. PER GUN	LOCATION	INTERNAL	EXTERNAL	MAX. LOAD	TYPE	
	PROP. MFR. TYPE	T-TAKE-OFF M-MILITARY C-CONTINUOUS	L-LENGTH H-HEIGHT T-TREAD W-WING AREA	C-COMBAT R-RECD LIM W-WAR MAX	OR LOCATION	U.S. GAL.	& CAPACITY	NO. GUNS	PER GUN	& TYPE	NO. & SIZE OR STATION	NO. & SIZE OR CAPACITY	LB.		
B-17F	WRIGHT R-1820-97 TURBO HAMILTON STD. 11.7" DIA. - 3BL. P.F., HYDROMATIC	T 1200/S L M 1200/27000 C 1000/30000	S 103'9" L 74'9" H 19'1" T 21'2" W 1120 SQ. FT.	B 36000 C 55000 R 56000 W 61000A	MAIN - WINGS BOMB BAY	6-1730 2x 410 2550 TOT	2) 2) 1) 2) 2) 2)	300 300 400 400 500 565	.50	NOSE - FLEX. SIDE WAIST-FL. RADIO COMPART. UPPER TURRET LOW BALL TURRET TAIL-FLEX. MT.	2-2000 6-1600 6-1000 12- 500 16- 250 21- 100	2-1000 2-2000 2-1600 2-1000	6-1600 2-1000 17600	SEE NOTE (B)	TECHNICAL ORDER 01-20EF-1. (1 OCT. 1943) EXTERNAL BOMBS ON SOME MODELS ONLY.
B-17F (WITH WING TIP TANKS)	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	MAIN - WINGS WING TIPS BOMB BAY	6-1730 2x 540 2x 410 3630 TOT	3) 2) 1) 2) 2) 2)	300 300 400 400 500 565	.50	AS ABOVE	A S	A B O V E	AS ABOVE	AS ABOVE	A S A B O V E
B-17G	AS ABOVE (SEE e)	AS ABOVE	S 103'9" L 74'4" H 19'1" T 21'2" W 1120 SQ. FT.	B 39000 C 55000 R 56000 W 61000A	AS ABOVE EXCEPT PROVISIONS ONLY FOR THE BOMB BAY TANKS	6-1730 2x 540 2x 410 3630 TOT	2) 2) 1) 2) 2) 2)	300 365 400 400 500 565	.50	CHINESE - FLEX. CHIN TURRET SIDE WAIST-FL. RADIO COMPART. UPPER TURRET LOW BALL TURRET TAIL-FLEX. MT.	AS ABOVE	PROV. FOR EXTERNAL RACKS	AS ABOVE	NOTE (B) plus RC-103	TECHNICAL ORDER 01-20EF-1. (1 OCT. 1943) LATEST B-17G'S HAVE NEW TYPE SUPERCHARGER (B-22) GIVING INCREASED ALTITUDE PERFORMANCE. LATER MODELS HAVE 600 RDS./GUN; EARLY MODELS 300 RDS./GUN. LENGTH DECREASED 5" ON LATER MODELS TO 74'4".

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							REMARKS ON PERFORMANCE											
	TO CLEAR 50'		GROUND-RUN		WEIGHT	STD. ALT.	MIL. POWER		MAX. CONTIN. POWER		TAKE OFF WEIGHT	BOMBS CARGO	TOTAL FUEL	MAX. CONTINUOUS POWER			MAX. CRUISE POWER		LONG RANGE								
	GROSS WEIGHT	T.O. DIST.	LAND. DIST.	LANDING SPEED			T.O. DIST.	LAND. DIST.	HIGH SPEED	RATE OF CLIMB				HIGH SPEED	RATE OF CLIMB		AT 10000 FT.	AT 25000 FT.	AT 10000 FT.	AT 25000 FT.	RANGE	ENDUR.	RANGE	ENDUR.			
B-17F	40000 50000 55000 56000	- - 3950 4100	3900 4750 5200 -	90 100 104 105	- - 3050 3150	2000 2700 3050 -	55000	30000 25000 20000 15000 10000 5000	298 299 288 274 263 252	100 725 850 950 1050 1125	280 274 266 255 245 236	225 150 550 675 750 4.0	52.0 36.2 25.7 17.3 10.2 4.0	56500 50500 56500	NONE NONE 6000	2550 1730 1730	1250 900 850	5.5 3.9 3.7	1100 950 900	5.6 4.0 3.8	1850 1300 1200	9.1 6.6 6.1	1950 1350 1250	8.9 6.3 5.9	2600 1800 1700	17.2 11.1 10.5	
B-17F (WITH WING TIP TANKS)	40000 50000 55000 56000 57000 61000	- - 3950 4100 4300 6100	3900 4750 5200 -	90 100 104 105	- - 3050 3150 3400 4800	2000 2700 3050 -	55000	A S A B O V E	A S A B O V E	A S A B O V E	A S A B O V E	A S A B O V E	A S A B O V E	A S A B O V E	A S A B O V E	A S A B O V E	A S A B O V E	A S A B O V E	A S A B O V E	A S A B O V E	A S A B O V E	A S A B O V E	A S A B O V E	A S A B O V E	A S A B O V E	A S A B O V E	MUST BE STRIPPED TO 61000 LB. MAX. FERRY RANGE MAY BE RESTRICTED BY INSUFFICIENT OIL IF ENGINE IS NOT IN BETTER THAN AVERAGE CONDITION; OIL CONSUMPTION 3 QT. TO GAL./HR. DEPENDING ON TIME SINCE OVERHAUL. LONG RANGE VALUES BASED ON CONSTANT M.P.H. A S A B O V E PERFORMANCE DATA NOT AVAILABLE WITH TYPE B-22 SUPERCHARGER.
B-17G	40000 50000 55000 56000 57000 61000	- - 3950 4100 4300 6100	3900 4750 5200 -	90 100 104 105	- - 3050 3150 3400 4800	2000 2700 3050 -	55000	30000 25000 20000 15000 10000 5000	289 290 279 266 255 244	300 675 800 900 1000 1075	272 266 258 247 238 229	175 150 525 625 725 4.2	54.2 37.8 26.8 18.0 10.6 4.2	61000 60500 60000 63500 60000	NONE NONE NONE 3000 6000	3630 2810 2550 2810 1730	- 1100 1250 1100 850	- 6.1 5.5 6.1 3.7	- 1500 1100 1500 850	- 6.2 5.6 6.2 3.8	- 2050 1850 2050 1200	- 10.1 9.1 10.1 6.1	- 2150 1950 2100 1250	- 9.9 8.9 9.9 5.9	- 3500 2800 2500 2700 1700	- 21.2 17.4 16.3 17.4 10.5	

NOTES: (B) 24 VOLTS RADIO SYSTEM

RED FIGURES ARE PRELIMINARY; SUBJECT TO REVISION AFTER FLIGHT CHECK

MILITARY POWER AVAILABLE FOR 5 MINUTES ONLY

(A) LIMITED TO 61,000 LB. BY FLYING CHARACTERISTICS.

SCR-211 FREQUENCY METER

SCR-2690 RADIO COMPASS

SCR-2714 COMMAND SET

SCR-287A LIAISON SET

SCR-535 SET (or SCR-995 or SCR-695)

SCR-578 EMERGENCY TRANSMITTER

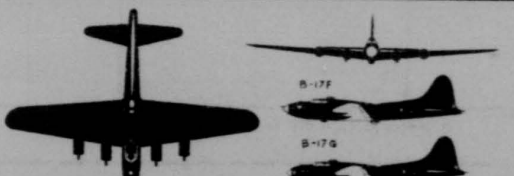
RC - 32 FILTER EQUIPMENT (Or RC-198)

RC - 36 INTERPHONE AMPLIFIER

RC - 43B MARKER BEACON

RC - 103 BLIND LANDING (Provisions only)

SCR-522 COMMAND SET



B-17  
"FORTRESS"

**B-17**

**"FORTRESS"**

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MANUFACTURED BY BOEING - DOUGLAS - VEGA

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CONSOLIDATED (SAN DIEGO) "CO"

MODEL & BLOCK-NO.	ARMAMENT			BOMBS			FUEL U.S. GAL. (MAXIMUM)
	NO GUNS & CALIBER	RDS. PER GUN	LOCATION & TYPE	INTERNAL	EXTERNAL	MAX. LOAD LB.	
				NO & SIZE	NO & SIZE		
B-24D-CO D thru 1st. 94(-15)	1) 2) .50 2)	200 400 400	NOSE.....FLEX. UPPER TURRET TAIL TURRET	4-2000 8-1000 12- 500 12- 250 20- 100	NONE	8000	2364
B-24D-CO Last 36(-15) thru -20	1) 2) .50 1) 2)	200 400 100 400	NOSE.....FLEX. UPPER TURRET TUNNEL...FLEX. TAIL TURRET	A S	A B O V E		3614
B-24D-CO -25 thru 1st. 25(-140)	3) 2) 2) .50 1) 2)	100 250 400 100 400	NOSE.....FLEX. SIDE WAIST..PL. UPPER TURRET TUNNEL...FLEX. TAIL TURRET	4-2000 8-1600 8-1000 12- 500 12- 250 20- 100	NONE	12800	AS ABOVE
B-24D-CO Last 9(-140) thru -170	3) 2) 2) .50 2) 2)	100 250 400 508 400	NOSE.....FLEX. SIDE WAIST..PL. UPPER TURRET LOW.BALL TRR. TAIL TURRET	A S	A B O V E		AS ABOVE
B-24J-CO (-1 thru -135)	2) 2) 2) .50 2) 2)	400 250 400 508 400	NOSE TURRET SIDE WAIST..PL. UPPER TURRET LOW.BALL TRR. TAIL TURRET	A S	A B O V E		AS ABOVE

NOTES: a NOT ON B-24D-25.

CONSOLIDATED (FT. WORTH) "CP"

MODEL & BLOCK-NO.	ARMAMENT			BOMBS			FUEL U.S. GAL. (MAXIMUM)
	NO GUNS & CALIBER	RDS. PER GUN	LOCATION & TYPE	INTERNAL	EXTERNAL	MAX. LOAD LB.	
				NO & SIZE	NO & SIZE		
B-24D-CF (-1 & -5)	3) 2) 2) .50 1) 2)	100 250 400 100 400	NOSE.....FLEX. SIDE WAIST..PL. UPPER TURRET TUNNEL...FLEX. TAIL TURRET	4-2000 8-1000 12- 500 12- 250 20- 100	NONE	8000	3614
B-24D-CF (-10 thru -20)	A S	A B O V E		4-2000 8-1600 8-1000 12- 500 12- 250 20- 100	AS ABOVE	12800	AS ABOVE
B-24J-CF (-1 thru -15)	2) 2) 2) .50 2) 2)	400 250 400 508 400	NOSE TURRET SIDE WAIST..PL. UPPER TURRET LOW.BALL TRR. TAIL TURRET	A S	A B O V E (SEE a)		AS ABOVE
B-24H-CF (-1 thru -15)	A S	A B O V E		A S	A B O V E		AS ABOVE
B-24I-CF -20	A S	A B O V E	NOSE TURRET S.WAIST-K6 MT. UPPER TURRET LOW.BALL TRR. TAIL TURRET	A S	A B O V E		AS ABOVE

NOTES: a B-10 SHACKLES FOR 8-1600 LB. BOMBS START ON 2101st.FORD KNOCK-DOWN SET.

DOUGLAS (TULSA) "DT" and FORD (WILLOW RUN) "FO"

MODEL & BLOCK-NO.	ARMAMENT			BOMBS			FUEL U.S. GAL. (MAXIMUM)
	NO GUNS & CALIBER	RDS. PER GUN	LOCATION & TYPE	INTERNAL	EXTERNAL	MAX. LOAD LB.	
				NO & SIZE	NO & SIZE		
B-24E-DT (-1 thru -15) (DOUGLAS)	2) 2) 2) .50 2) 2)	400 250 400 508 400	NOSE TURRET SIDE WAIST..PL. UPPER TURRET LOW.BALL TRR. TAIL TURRET	4-2000 8-1600 8-1000 12- 500 12- 250 20- 100	NONE	12800	3614
B-24H-FO (-1 thru -15) (FORD)	A S	A B O V E		A S	A B O V E		AS ABOVE
B-24H-DT & FO -20	A S	A B O V E	NOSE TURRET S.WAIST-K6 MT. UPPER TURRET LOW.BALL TRR. TAIL TURRET	A S	A B O V E		AS ABOVE

NOTES: a B-10 SHACKLES FOR 8-1600 LB. BOMBS STARTS ON 2101st.FORD KNOCK-DOWN SET.

NORTH AMERICAN (DALLAS) "NT"

MODEL & BLOCK-NO.	ARMAMENT			BOMBS			FUEL U.S. GAL. (MAXIMUM)
	NO GUNS & CALIBER	RDS. PER GUN	LOCATION & TYPE	INTERNAL	EXTERNAL	MAX. LOAD LB.	
				NO & SIZE	NO & SIZE		
B-24G-NT	3) 2) 2) .50 2) 2)	250 TOT. 250 400 508 400	NOSE.....FLEX. SIDE WAIST..PL. UPPER TURRET LOW.BALL TRR. TAIL TURRET	4-2000 8-1000 12- 500 12- 250 20- 100	NONE	8000	3614
B-24G-NT (-1 thru -5)	2) 2) 2) .50 2) 2)	400 250 400 508 400	NOSE TURRET SIDE WAIST..PL. UPPER TURRET LOW.BALL TRR. TAIL TURRET	A S	A B O V E		AS ABOVE
B-24G-NT (-10 thru -20)	A S	A B O V E		4-2000 8-1600 8-1000 12- 500 12- 250 20- 100	NONE	12800	AS ABOVE

NOTES: a LOWER BALL TURRET ON 5th.& SUBSEQUENT; NO TUNNEL GUN ON 1st.4 ARTICLES.

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CONSOLIDATED (SAN DIEGO) "CO"

ARMAMENT			BOMBS			FUEL
RDS. PER. GUN	LOCATION & TYPE	INTERNAL	EXTERNAL	MAX. LOAD LB.	U.S. GAL. (MAXIMUM)	
		NO. & SIZE	NO. & SIZE			
200 400 400	NOSE.....FLEX. UPPER TURRET TAIL TURRET	4-2000 8-1000 12- 500 12- 250 20- 100	NONE	8000	2364	
200 400 100 400	NOSE.....FLEX. UPPER TURRET TUNNEL...FLEX. TAIL TURRET	A S	A B O V E		3614	
100 250 400 100 400	NOSE.....FLEX. SIDE WAIST..FL. UPPER TURRET TUNNEL...FLEX. TAIL TURRET	4-2000 8-1600 8-1000 12- 500 12- 250 20- 100	NONE	12800	AS ABOVE	
100 250 400 508 400	NOSE.....FLEX. SIDE WAIST..FL. UPPER TURRET LOW.BALL TRR. TAIL TURRET	A S	A B O V E		AS ABOVE	
400 250 400 508 400	NOSE TURRET SIDE WAIST..FL. UPPER TURRET LOW.BALL TRR. TAIL TURRET	A S	A B O V E		AS ABOVE	

CONSOLIDATED (FT. WORTH) "CP"

MODEL & BLOCK NO.	ARMAMENT			BOMBS			FUEL
	NO GUNS & CALIBER	RDS. PER. GUN	LOCATION & TYPE	INTERNAL NO. & SIZE	EXTERNAL NO. & SIZE	MAX. LOAD LB.	U.S. GAL. (MAXIMUM)
B-24D-CF (-1 & -5)	3) 2) 2) .50 1) 2)	100 250 400 100 400	NOSE.....FLEX. SIDE WAIST..FL. UPPER TURRET TUNNEL...FLEX. TAIL TURRET	4-2000 8-1000 12- 500 12- 250 20- 100	NONE	8000	3614
B-24D-CF (-10 thru -20)	A S	A B O V E		4-2000 8-1600 8-1000 12- 500 12- 250 20- 100	AS ABOVE	12800	AS ABOVE
B-24J-CF (-1 thru -15)	2) 2) 2) .50 2) 2)	400 250 400 508 400	NOSE TURRET SIDE WAIST..FL. UPPER TURRET LOW.BALL TRR. TAIL TURRET	A S	A B O V E (SEE a)		AS ABOVE
B-24B-CF (-1 thru -15)	A S	A B O V E		A S	A B O V E		AS ABOVE
B-24-CF -20	A S	A B O V E	NOSE TURRET S.WAIST-K6 MT. UPPER TURRET LOW.BALL TRR. TAIL TURRET	A S	A B O V E		AS ABOVE

NOTES: a B-10 SHACKLES FOR 8-1600 LB. BOMBS START ON 2101st.FORD KNOCK-DOWN SET.

USA) "DT" and FORD (WILLOW RUN) "FO"

ARMAMENT			BOMBS			FUEL
RDS. PER. GUN	LOCATION & TYPE	INTERNAL	EXTERNAL	MAX. LOAD LB.	U.S. GAL. (MAXIMUM)	
		NO. & SIZE	NO. & SIZE			
400 250 400 508 400	NOSE TURRET SIDE WAIST..FL. UPPER TURRET LOW.BALL TRR. TAIL TURRET	4-2000 8-1600 8-1000 12- 500 12- 250 20- 100	NONE	12800	3614	
A B O V E		A S	A B O V E		AS ABOVE	
A B O V E	NOSE TURRET S.WAIST-K6 MT. UPPER TURRET LOW.BALL TRR. TAIL TURRET	A S	A B O V E		AS ABOVE	

FOR 8-1600 LB. BOMBS STARTS ON 2101st.FORD KNOCK-DOWN SET.

NORTH AMERICAN (DALLAS) "NT"

MODEL & BLOCK NO.	ARMAMENT			BOMBS			FUEL
	NO GUNS & CALIBER	RDS. PER. GUN	LOCATION & TYPE	INTERNAL NO. & SIZE	EXTERNAL NO. & SIZE	MAX. LOAD LB.	U.S. GAL. (MAXIMUM)
B-24G-NT	3) 2) 2) .50 2) 2)	230 TOT. 250 400 508 a 400	NOSE.....FLEX. SIDE WAIST..FL. UPPER TURRET LOW.BALL TRR. TAIL TURRET	4-2000 8-1000 12- 500 12- 250 20- 100	NONE	8000	3614
B-24G-NT (-1 thru -5)	2) 2) 2) .50 2) 2)	400 250 400 508 400	NOSE TURRET SIDE WAIST..FL. UPPER TURRET LOW.BALL TRR. TAIL TURRET	A S	A B O V E		AS ABOVE
B-24G-NT (-10 thru -20)	A S	A B O V E		4-2000 8-1600 8-1000 12- 500 12- 250 20- 100	NONE	12800	AS ABOVE

NOTES: a LOWER BALL TURRET ON 5th.& SUBSEQUENT; NO TUNNEL GUN ON 1st.4 ARTICLES.

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**TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART**

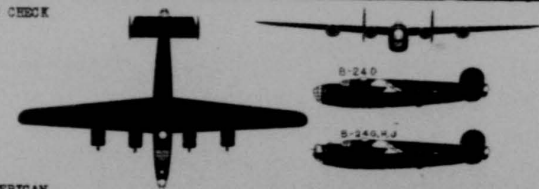
PAGE 2  
AS OP  
DATE 20 FEB 1944

MODEL & BLOCK NO.	ENGINE & PROP.		SIZE		WT.	COMBAT CREW	FUEL		ARMAMENT			BOMBS-CARGO-PASS.		RADIO	REMARKS & REFERENCE
	ENGINE MFR. MODEL	B.H.P./ALT.	S-SPAN	B-BASIC			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		
B-24D	PRATT-WHITELEY R-1830-43 TURBO HAMILTON STD. 11 7/8" DIA. - 3EL. F.F. HYDRA-MATIC	T 1200/8 L M 1200/25000 C 1100/25000	S 110'0" L 66'4" H 18'0" T 25'8" W 104'8 SQ. *	B 36500 C 56000 R 56000 W 64000A	8	MAIN - WINGS	12-2364	3) 100 2) 250 2) 400 1) 100 2) 400	NOSE - FLEX. SIDE WAIST-FL. UPPER TURRET TUNNEL - FLEX. TAIL TURRET	L-2000 8-1600 8-1000 12-500 12-250 20-100	NONE	12500	SEE NOTE (B)	TECHNICAL ORDER 01-580-1 (10 NOV. 1943)	
B-24D (WITH BOMB BAY TANKS)	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	8	MAIN - WINGS BOMB BAY	12-2364 2x 400 3164 TOT	3) 100 2) 250 2) 400 2) 508 2) 400	NOSE - FLEX. SIDE WAIST-FL. UPPER TURRET LOW BALL TURRET TAIL TURRET	AS	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	
B-24D (WITH WING TIP TANKS)	AS ABOVE EXCEPT R-1830-65 ENGINE IN LIEU OF -43 ON B-24D-20-07 & B-24D-135-00 thru -170-00.	AS ABOVE	AS ABOVE	B 36500 C 56000 R 56000 W 64000A	8	MAIN - WINGS BOMB BAY WING TIPS	12-2364 2x 400 2x 225 3614 TOT	AS	AS ABOVE	AS	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	
B-24G,H&J	AS ABOVE EXCEPT R-1830-65 ENGINE IN LIEU OF -43 ON B-24G-5-WT & sub; B-24H-5-C & sub; B-24J SERIES.	AS ABOVE	S 110'0" L 67'2" H 18'0" T 25'8" W 104'8 SQ. *	B 37500 C 56000 R 56000 W 64000A	8	AS ABOVE	AS ABOVE	2) 400 2) 250 2) 400 2) 508 2) 400	NOSE TURRET *SIDE WAIST-FL. UPPER TURRET LOW BALL TURRET TAIL TURRET	AS	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE a BEING INCREASED TO 500 RDS; NO EFFECTIVE POINT YET. b FEW EXTERNAL BOMB RACKS BEING INSTALLED AT MOD. CENTERS. * (K-6) MOUNT AT SIDE WAIST POS. ON B-20-BOMBS. (OF, DT & FC)	

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										REMARKS ON PERFORMANCE			
	TO CLEAR 50		GROUND-RUN		STD. ALT.	MIL. POWER		MAX. CONTIN. POWER		TAKE OFF WEIGHT	BOMBS CARGO	TOTAL FUEL	MAX. CONTINUOUS POWER		MAX. CRUISE POWER		LONG RANGE									
	T.O. DIST.	LAND. DIST.	LANDING SPEED	T.O. DIST.		LAND. DIST.	HIGH SPEED	RATE OF CLIMB	HIGH SPEED				RATE OF CLIMB	TIME TO CLIMB	AT 10000 FT.	AT 25000 FT.	AT 10000 FT.	AT 25000 FT.	AT 10000 FT.	AT 25000 FT.						
B-24D	40000	-	3300	90	-	2800	30000	-	600	-	600	33.0	900	4.0	1000	3.9	1850	9.5	1950	8.9	2350	15.0				
B-24D (WITH BOMB BAY TANKS)	40000	1500	1200	103	3250	3150	25000	303	1050	297	850	25.8	53000	NONE	2364	900	4.0	1000	3.9	1850	9.5	1950	8.9	2350	15.0	
B-24D (WITH WING TIP TANKS)	40000	5050	1300	105	3600	3550	20000	290	1100	284	900	19.9	58000	5000	2364	850	3.8	950	3.7	1700	8.8	1800	8.2	2200	14.2	
B-24G,H&J	40000	-	3300	90	-	2800	30000	278	500	278	500	34.5	63500	NONE	3614	1200	5.1	1300	5.1	2400	12.1	2500	11.5	3100	20.3	*MAX. FERRY RANGE MAY BE RESTRICTED BY INSUFFICIENT OIL IF ENGINE IS NOT IN BETTER THAN AVERAGE CONDITION. OIL CONSUMPTION 3 QT. TO 3 GAL./HR. DEPENDING ON TIME SINCE OVERHAUL.

- NOTES: (B) 24 VOLT RADIO SYSTEM
- SCR-211 FREQUENCY METER
  - SCR-2590 RADIO COMPASS
  - SCR-271A COMMAND SET
  - SCR-287A LIAISON SET
  - SCR-535 SET (or SCR-995 or SCR-695)
  - SCR-578 EMERGENCY TRANSMITTER
  - RC - 32 FILTER EQUIPMENT (or RC-198)
  - RC - 36 INTERPHONE AMPLIFIER
  - RC - 138 MARKER BEACON
  - RC - 103 BLIND LANDING (Provisions only)
  - AN (AT-3) (Installed in some models)

RED FIGURES ARE PRELIMINARY; SUBJECT TO REVISION AFTER FLIGHT CHECK  
\* MILITARY POWER AVAILABLE FOR 5 MINUTES ONLY.  
(A) LIMITED TO 64000 LB. BY FLYING CHARACTERISTICS.



B-24

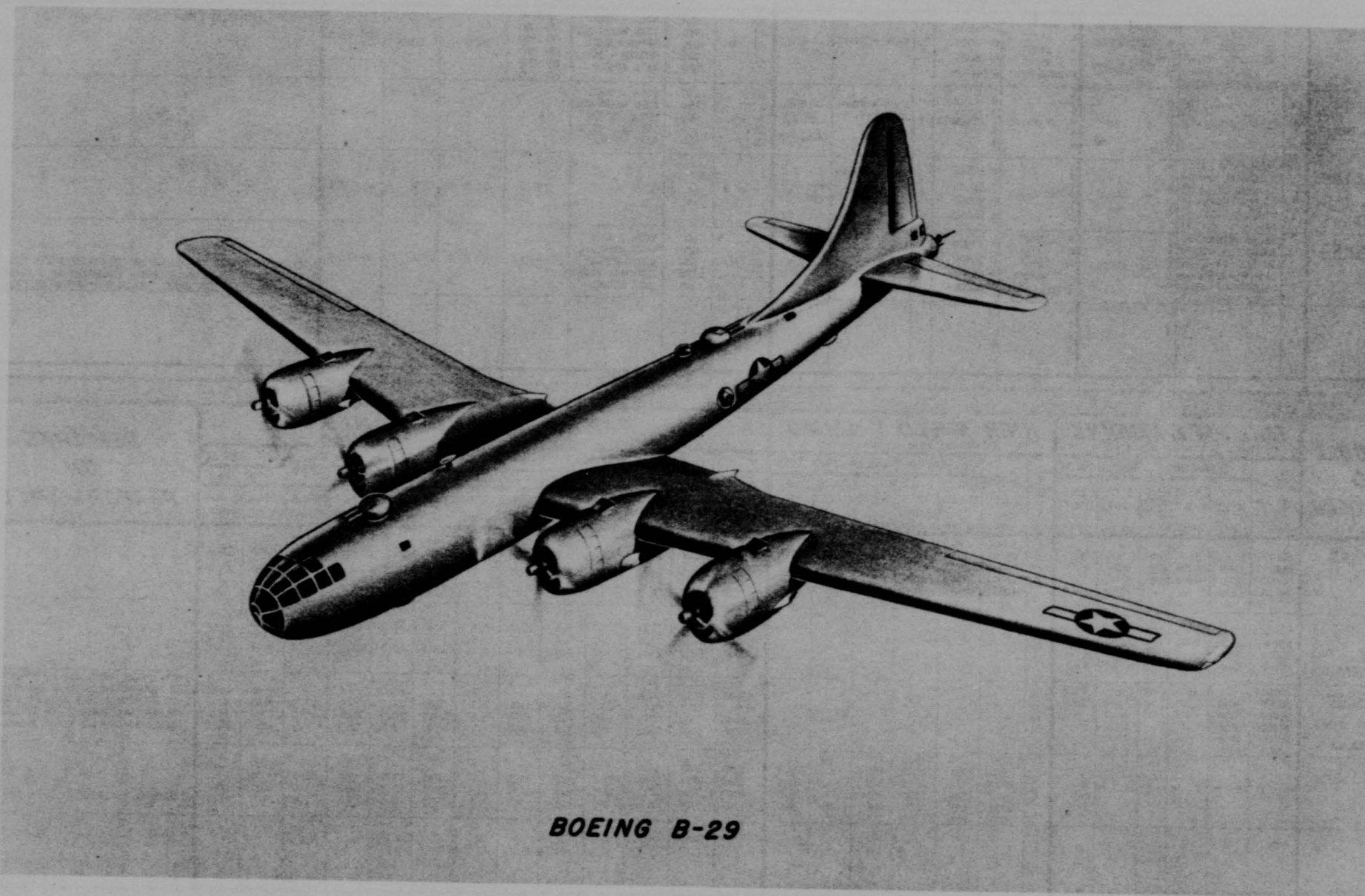
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**BOEING B-29**

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**TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART**

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AS OF  
DATE 29 FEB 1944

MODEL & BLOCK NO.	ENGINE & PROP.			SIZE	WT.	COMBAT CREW	FUEL		ARMAMENT			BOMBS-EBBO-PASS		RADIO	REMARKS & REFERENCE	
	NUMBER	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	RDS. PER GUN	LOCATION & TYPE	INTERNAL NO. & SIZE OR STATION	EXTERNAL NO. & SIZE OR CAPACITY	MAX. LOAD LB.		TYPE
B-29-BW -I TO -10 INCL	4	WRIGHT R-3350-23 TURBO HAMILTON STB. 16" DIA. - 4 BL. F.F., HYDROMATIC	T 2200/8 L M 2200/25000 C 2000/25000	S 141'3" L 99'0" H 27'9" T 31'6" W 1739 sq. ft.	B 71000 C 105000 R 120000 W - W	10	OUTBD.-WINGS INBD.-WINGS BOMB BAY	11-2735 8-2873 4x 640 8168 TOT	1-20MM 2) 1000 2) 1000 2) .50 2) 1000 2) 1000	100 1000 1000 1000 1000	TAIL-M2, TYPE B UPPER POSE TR. 1-1000 UPPER REAR TR. 1-1600 LOWER POSE TR. 1-1000 LOWER REAR TR. 1-500 TAIL-POWER MT. 80-100 <sup>b</sup>	1-1000 4-3000 1-1600 1-1000 1-500	NONE	20000 SEE (A)	SCR-211, 2690, 2718 287A, 578, & 695A. RC-36, 1, 3B & 103 <sub>c</sub>	TECHNICAL ORDER 01-2087-1. (20 AUG. 1943) b-SELECTED ON B-29-10-BW and SUBSEQUENT MODELS. c-RC-103 NOT ON B-29-1-BW. d-OUTBOARD THREAD-31'6" ; INBOARD THREAD-25'8". e-SEE TO INCREASE OF ORIGINALLY PLANNED BASIC WEIGHT. f-SEE TO INCREASE OF ORIGINALLY PLANNED BASIC WEIGHT. COMBAT & RECOMMEND. WT. ARE BEING INCREASED; NO DATA.
			T M C	S L H T W	B C R W											
			T M C	S L H T W	B C R W											
			T M C	S L H T W	B C R W											
			T M C	S L H T W	B C R W											

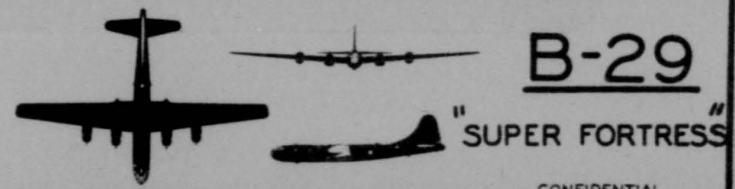
COLUMN --- 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

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										REMARKS ON PERFORMANCE				
	GROSS WEIGHT LB.	TO CLEAR 50' FT.		LANDING SPEED MPH	GROUND-RUN		WEIGHT LB.	STD. ALT. FT.	MIL. POWER		MAX. CONTIN. POWER		TAKE OFF WEIGHT LB.	BOMBS CARGO LB.	TOTAL FUEL U.S. GAL.	MAX. CONTINUOUS POWER		MAX. CRUISE POWER		LONG RANGE							
		T.O. DIST. FT.	LAND. DIST. FT.		T.O. DIST. FT.	LAND. DIST. FT.			HIGH SPEED M.P.H.	RATE OF CLIMB FT./MIN.	HIGH SPEED M.P.H.	RATE OF CLIMB FT./MIN.				TIME TO CLIMB MIN.	AT 10000 FT.	AT 25000 FT.	AT 10000 FT.	AT 25000 FT.	AT 10000 FT.	ENDUR. HOURS		RANGE MILES	ENDUR. HOURS	RANGE MILES	ENDUR. HOURS
B-29-BW -I TO -10 INCL	90000 105000 120000	3150 1500 6100	3500 1400 "	100 110 120	2200 3150 4300	2500 3000 -	105000	30000 25000 20000 15000 10000 5000	372 360 315 332 317 303	520 740 900 1040 1160 1250	360 317 334 320 307 293	340 550 715 850 970 1060	40.0 29.0 21.0 15.0 10.0 5.0	120000 120000 (SEE NOTE A)	NONE 9000	6888 5608	1800 1500	6.8 5.5	2000 1600	6.8 5.5	3500 2800	15.2 12.2	2900 2200	10.9 8.1	4200 3300	21.5 16.9	* MOST OF FLIGHT REQUIRES THAT MAX. CRUISE POWER BE EXERCISED SLIGHTLY BY USING AUTO. RICH MIXTURE.

18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45

NOTES: (A)  
INCREASE IN BASIC WEIGHT PROHIBITS USE OF MORE THAN 2 OF THE 4 BOMB BAY TANKS OR MORE THAN 9000 LB. BOMBS WITH FULL MAIN FUEL WITHOUT EXCEEDING RECOMMENDED LIMIT OF 120000 LB. WEIGHT.  
20000 LB. MAX. BOMB LOAD POSSIBLE WITH PARTIALLY FILLED MAIN FUEL TANKS ONLY.

RED FIGURES ARE PRELIMINARY; SUBJECT TO REVISION AFTER FLIGHT CHECK

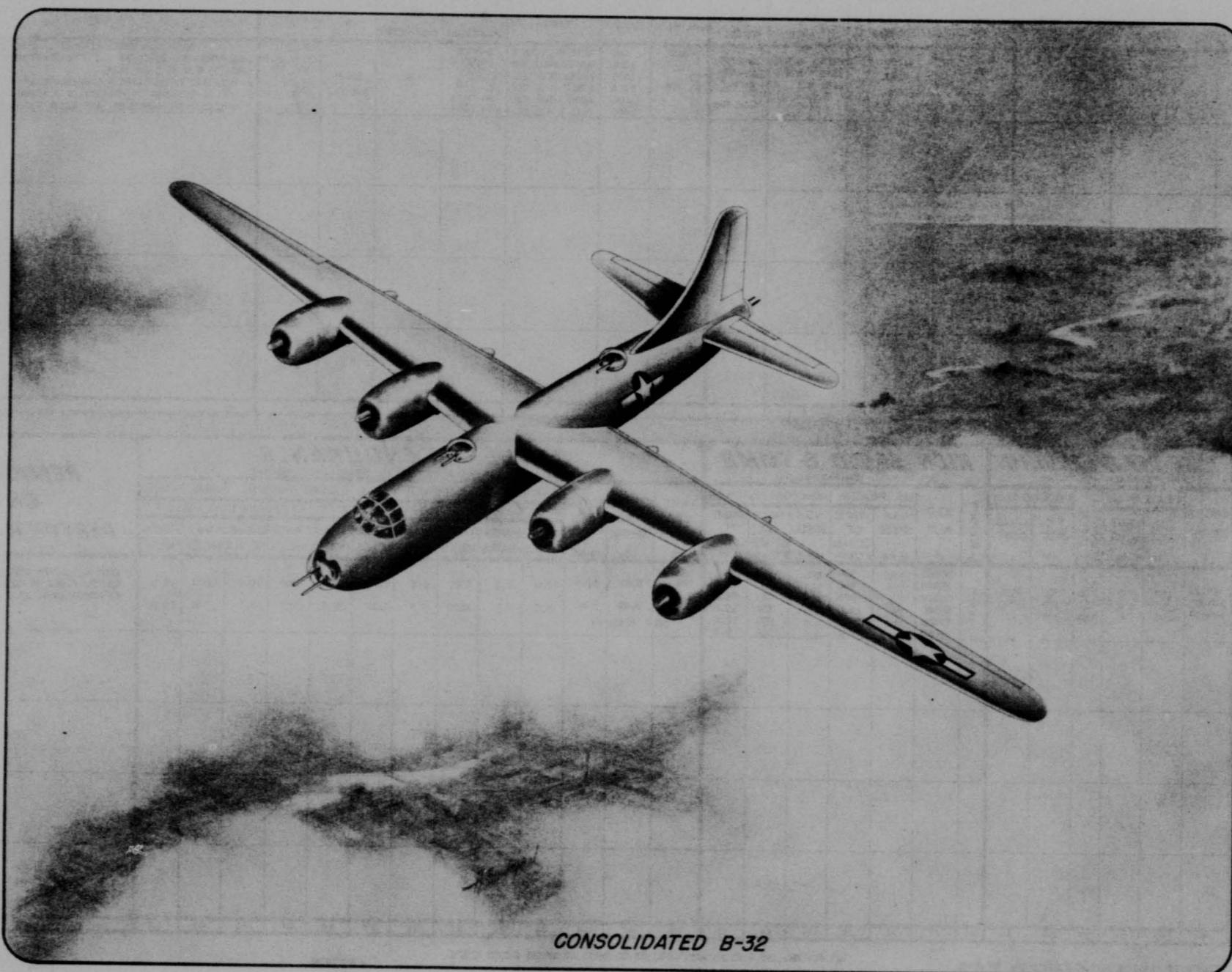


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PAGE 3a  
AS OF:  
DATE 23 FEB 1944

TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART																
MODEL & BLOCK NO.	ENGINE & PROP.		SIZE		WT.	COMBAT CREW	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	B-BASIC C-COMBAT R-RECD LIM. W-WAR MAX.	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		
B-32-CF	WRIGHT R-3350-23 TURBO CURTISS 16" DIA. - 1/2 BL. COMST. SPD. - ELCTR.	T 2200/S L M 2200/30000 C 2000/32300	S 135' 0" L 82' 11" H 28' 0" T 28' 0" W 1422 SQ. FT.	B 62670 C 100000 R 102800 W 123250	8	IMED. (INNER CENTER) 5226 LINES 515 OUTER 5226 OUTER 5226 (SEE F)	2) 2) 2) 2)	365 400 400 550 1000	NOSE TURRET FRONT TOP THR. REAR TOP THR. LOW BALL THR. TAIL TURRET	1-1000 8-2000 8-1600 16-1000 10-500	NONE	20000	302-271N, 211, 254, 287, 522, 695 & 718, 80-36, 103, 193 & 198	(MANUFACTURER'S PRELIMINARY ESTIMATES) a 365 RDS./GUN (NORMAL); SPACE PROVISIONS FOR 600 RDS./GUN f MAXIMUM WING TANK CAPACITY-5226 GAL. OVERLOAD CON- DITIONS WITH 5226 GAL. ASSUMES 3000 GAL. CARRIED IN FUS. r RADIO LISTED FOR EXP. PLANES & FIRST FEW PROD. ARTICLES.		
		T M C	S L H T W	B C R W												
		T M C	S L H T W	B C R W												
		T M C	S L H T W	B C R W												
		T M C	S L H T W	B C R W												

COLUMN — 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

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										REMARKS ON PERFORMANCE				
	TO CLEAR 50		GROUND-RUN		WEIGHT	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.	LANDING SPEED	T.O. DIST.			LAND. DIST.	HIGH SPEED	RATE OF CLIMB	HIGH SPEED				RATE OF CLIMB	TIME TO CLIMB	RANGE	ENDUR.	RANGE	ENDUR.	RANGE		ENDUR.	RANGE	ENDUR.	
B-32-CF	95000 100000 110000 123250	1650 3190 6250 7700	1600 3850 1150 -	113 114 134 -	5650 1100 5000 6150	2000 2150 2350 -	25000 20000 15000 10000 5000 S L	360 343 327 310 296 282	1150 1300 1400 1500 1550 1600	345 332 315 300 286 273	900 1050 1150 1250 1300 1300	17.0 15.3 11.2 6.5 3.2 0.0	123250 118000 118950 123250 100000 20000	a 5226 NONE 20000 b 21300 2000 20000	8226 8226 5226 5226 5150 2272	2300 2395 1150 1150 1150 600	8.6 8.6 5.4 5.4 5.3 2.1	2650 2675 1650 1625 1650 650	8.6 1500 5.4 2750 2900 1150	16.7 18.1 11.6 14.8 11.5 1.8	- - - - 3150 1250	11.2 14.5 14.5 14.5 14.5 14.5	2750 6000 3650 3550 4000 1650	30.3 32.1 19.5 18.3 22.1 2.3	a CARGO ONLY. b INCLUDES 20000 LB. BOMBS PLUS 4300 LB. CARGO.

NOTES:

RED FIGURES ARE PRELIMINARY; SUBJECT TO REVISION AFTER FLIGHT CHECK  
/ MILITARY POWER AVAILABLE FOR 5 MINUTES.



B-32

MANUFACTURED BY CONSOLIDATED-VULTURE (Ft. Worth) "CF"

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NORTH AMERICAN (INGLEWOOD) "NA"  
(KANSAS CITY) "NC"

MODEL & BLOCK NO.	ARMAMENT			BOMBS			FUEL U.S. GAL. (MAXIMUM)
	NO GUNS & CALIBER	RDS. PER GUN	LOCATION & TYPE	INTERNAL	EXTERNAL	MAX. LOAD LB.	
				NO & SIZE	NO & SIZE		
B-25C-NA (-1 thru -20)	1) 1) 2) .50	300 300	NOSE... FLEX. NOSE... FIXED	1-2000 3-1000	1-2000T 6- 325	3-1000 8- 250	1559 (B-25C)
B-25D-NE (-1 thru -15) *	2) 2)	200 200 a	UPPER TURRET LOWER TURRET	6- 500 8- 250 12- 100	8- 250 8- 100	5000	1644 (B-25D)
B-25C-NA (-25)	AS ABOVE	EXCEPT NO LOWER TURRET		1-2000 2-1600 3-1000	AS ABOVE	2-1600 8- 250	1524 (B-25C)
B-25D-NC (-20 thru -35)	ON 210 (D-20), -25, -30 & -35.			6- 500 8- 250 12- 100		5200	1649 (B-25D)
B-25G-NA (-1 thru -10)	1-75MM 2-.50 2-.50 2-.50	21 400 200 200 c	NOSE CANNON M4 NOSE... FIXED UPPER TURRET LOWER TURRET	A S	A B O V E		1649
B-25H-NA (-1 thru -10)	1-75MM 4-.50 4-.50 d 2-.50 2-.50 2-.50	21 400 400 d 200 200 500	NOSE CAN. TURRET NOSE... FIXED NOSE PACKAGE UPPER TURRET SIDE WAIST-FL. TAIL... POWER MT.	AS ABOVE	NONE	3200	1624
B-25J-NC (-1 & Subseqt.)	4) 1) 2) 2) 2)	400 300 200 200 600	NOSE... PACKAGE NOSE... FLEX. NOSE... FIXED SIDE WAIST-FL. UPPER TURRET TAIL... POWER MT.	AS ABOVE	1-2000T 6- 325 8- 250 8- 100	2-1600 8- 250 5200	AS ABOVE

NOTES: \*B-25C-1 & D-1 ARMAMENT SAME AS B-25C & D. c NO LOWER TURRET ON 78(G-5) & -10.  
 T TORPEDO a NO LOWER TURRET ON 80(B-25D-15) ONLY. d B-25H-1 HAS 2 PACKAGE GUNS.  
 e EXTERNAL b NOT CARRIED ON 1st.157(B-25C-1).

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TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART																
MODEL & BLOCK NO.	ENGINE & PROP.		SIZE		WT.		FUEL		ARMAMENT		BOMBS-CARGO-PASS.		RADIO		REMARKS & REFERENCE	
	NUMBER	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	COMBAT CREW	TANK TYPE OR LOCATION	NO. TANKS & CAPACITY U.S. GAL.	NO. GUNS & CALIBER	RDS PER GUN	LOCATION & TYPE	INTERNAL		MAX. LOAD LB.		TYPE
												NO. & SIZE OR STATION	EXTERNAL NO. & SIZE OR CAPACITY			
B-25C & D (NA & NC)	2	WRIGHT R-2600-13 2 SPD. SUPERCH. HAMILTON STD. 12" DIA. - 3 BL. F.P. HYDROMATIC	1700/5 L 1700/15000 1500/6700 1350/13500	5 67'6" 15'9" 19'4" 610 sq. ft.	B 20500 C 33500 R 33500 W 35000 B	5	MAIN - WINGS 2 x 124 MAIN - WINGS 2 x 151 BOMB BAY 1 x 285 1254 TOT.	2 2 1	1-30 2-50 2-50	500 400 350	NOSE - FLEX. UPPER TURRET LOWER TURRET	1-2000 2-1000 6-500 8-250 12-100	NONE	3000	SEE (A)	TECHNICAL ORDER 01-600B-1. (1 MAY 1943) F-FUEL CAPACITY OF LAST 102 (B-25C's) SAME AS BELOW. S-LENGTH OF B-25C SERIES IS 53'
B-25C-NA -1 TO -25 INCL. B-25D-NC -1 TO -35 INCL.	2	AS ABOVE	AS ABOVE	AS ABOVE	B 22000 C 33500 R 33500 W 35000 B	5	MAIN - WINGS 2 x 124 MAIN - WINGS 2 x 151 AUX. - WINGS 6 - 304 SIDE WAIST 1 x 125 BOMB BAY 1 x 285 1254 TOT.	2 2 6 1	1) 1) .50 2)	300 300 400 350	NOSE - FLEX. NOSE - FIXED UPPER TURRET LOWER TURRET (On some models)	1-2000 (SEE C) 2-1600 3-1000 6-325 8-250 8-100	NONE	2-1600 2-250	AS ABOVE	TECHNICAL ORDER SAME AS ABOVE B-B-25C-1 & D-1 ARMAMENT SAME AS B-25C & D. D-CARRIED ON LATER MODELS ONLY. F-B-25C-25 & D-20 THROUGH -35 FUEL CAPACITY SAME AS BELOW: 1-125 GAL. SIDE WAIST TANK ON B-25D SERIES ONLY.
B-25G-NA -1 TO -10 INCL.	2	AS ABOVE	AS ABOVE	AS ABOVE	B 21700 C 33500 R 33500 W 35000 B	4	MAIN - WINGS 2 x 124 MAIN - WINGS 2 x 151 AUX. - WINGS 6 - 304 SIDE WAIST 1 x 125 BOMB BAY 1 x 285 1254 TOT.	2 2 6 1	1-75MM 1) 2) .50 2)	21 400 400 350	NOSE CANON-ML NOSE - FIXED UPPER TURRET LOWER TURRET (On some models)	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	TECHNICAL ORDER 01-600G-1. (NOV. 10 DEC. 1943) F-BOMB BAY FUEL CAPACITY CONSISTS OF 1-215 GAL. SELF SEALING REMOVABLE TANK & 1-335 GAL. METAL DROPPABLE TANK; 1-505 GAL. METAL TANK IS INTERCHANGABLE.
B-25H-NA -1 TO -10 INCL.	2	WRIGHT R-2600-13 or -29 2 SPD. SUPERCH. HAMILTON STD. 12" DIA. - 3 BL. F.P. HYDROMATIC	AS ABOVE	AS ABOVE	B 22000 C 33500 R 33500 W 35000 B	5	MAIN - WINGS 2 x 124 MAIN - WINGS 2 x 151 AUX. - WINGS 6 - 304 SIDE WAIST 1 x 125 BOMB BAY 1 x 285 1254 TOT.	2 2 6 1	1-75MM 1) 2) .50 2)	21 400 400 350	NOSE CANON-FIXED NOSE - FIXED PORK - PACKAGE SIDE WAIST-PL. UPPER TURRET LOWER TURRET	AS ABOVE	(SEE C) 1-2000 T	3200	AS ABOVE	TECHNICAL ORDER 01-600H-1. (15 OCT. 1943) B-B-25H-1 CARRIES 2 INSTEAD OF 1 PACKAGE GUNS. F-BOMB BAY FUEL NOTE SAME AS FOR B-25G SHOWN ABOVE.
B-25J-NC -1,	2	AS ABOVE	AS ABOVE	AS ABOVE	B 21100 C 33500 R 33500 W 35000 B	6	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	TECHNICAL ORDER 01-600J-1. (20 DEC. 1943) B-FUTURE MODELS WILL CARRY TOTAL OF 3(.50 GAL.) FIXED HOOK GUNS & NO FLEX. NOSE GUN.

MODEL & BLOCK NO.	TAKE OFF & LANDING						HIGH SPEED & CLIMB						RANGE & ENDURANCE						REMARKS ON PERFORMANCE								
	HARD SURFACE - NO WIND						AT NORMAL COMBAT WEIGHT						STATUTE AIR MILES - NO WIND - NO ALLOWANCE FOR RESERVE														
	TO CLEAR 50'		GROUND-RUN		LANDING SPEED		WEIGHT	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							
GROSS WEIGHT	T.O. DIST.	LAND. DIST.	T.O. DIST.	LAND. DIST.	MPH	FT.			MPH	RATE OF CLIMB	HIGH SPEED	RATE OF CLIMB				TIME TO CLIMB	AT 10000 FT.	AT 25000 FT.	AT 10000 FT.	AT 25000 FT.	RANGE	ENDUR.	RANGE	ENDUR.			
B-25C & D (NA & NC)	30000	3800	3300	99	1950	1800	33500	20000	267	850	262	725	15.9	30000	NONE	1255	950	3.9	-	-	1475	7.0	-	-	1850	10.3	
B-25C-NA -1 TO -25 INCL. B-25D-NC -1 TO -35 INCL.	32000	4700	3900	112	3700	2000	33500	20000	266	800	260	700	16.4	34900	NONE	1694	-	-	-	-	-	-	-	-	2700	11.8	* SPECIAL MISSION USING 1-125 GAL. SIDE WAIST FUEL TANK.
B-25G-NA -1 TO -10 INCL.	32000	4700	3900	112	3700	1950	33500	20000	266	800	260	700	16.4	34900	NONE	1694	-	-	-	-	-	-	-	-	2700	11.8	* SPECIAL MISSION USING 1-125 GAL. SIDE WAIST FUEL TANK.
B-25H-NA -1 TO -10 INCL.	32000	4700	3900	112	3700	1950	33500	20000	266	800	260	700	16.4	34900	NONE	1694	-	-	-	-	-	-	-	-	2700	11.8	* SPECIAL MISSION USING 1-125 GAL. SIDE WAIST FUEL TANK.
B-25J-NC -1,	32000	4700	3900	112	3700	1950	33500	20000	266	800	260	700	16.4	34900	NONE	1694	-	-	-	-	-	-	-	-	2700	11.8	* SPECIAL MISSION USING 1-125 GAL. SIDE WAIST FUEL TANK.

NOTES: (A) 24 VOLT RADIO SYSTEM

SCR-211 FREQUENCY METER  
SCR-259G RADIO COMPASS  
SCR-274L COMMAND SET (or SCR-522)  
SCR-287A LIAISON SET  
SCR-525 SET (or SCR-595 or SCR-695)  
SCR-578 EMERGENCY TRANSMITTER  
RC - 32 FILTER EQUIPMENT (or RC-196)  
RC - 138 MARKER BRACON  
RC - 103 BLIND LANDING (Provisions only)  
RC - 196 CONTACTOR UNIT  
RC - 36 INTERPHONE AMPLIFIER

RED FIGURES ARE PRELIMINARY: SUBJECT TO REVISION AFTER FLIGHT CHECK  
\* MILITARY POWER AVAILABLE FOR 5 MINUTES ONLY.  
(B) LIMITED TO 35000 LB. BY FLYING CHARACTERISTICS.  
(C) TORPEDOS BEING USED IN LIMITED QUANTITIES ONLY.

EXTERNAL  
T TORPEDO

**B-25**  
"MITCHELL"

MANUFACTURED BY NORTH AMERICAN (Inglewood) "NA" & NORTH AMERICAN (Kansas City) "NC"

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MODEL & BLOCK NO.	ARMAMENT			BOMBS			FUEL  U.S. GAL. (MAXIMUM)
	NO GUNS & CALIBER	RDS. PER GUN	LOCATION & TYPE	INTERNAL	EXTERNAL	MAX. LOAD LB.	
				NO & SIZE	NO & SIZE		
B-26B-MA (B thru -4)	1-.30 1-.30 2-.50 2-.50	600 600 1500 400	NOSE...FLEX. TUNNEL...FLEX. TAIL...FLEX.MT. UPPER TURRET SIDE WAIST-FL.	2-2000 2-1600 4-1000 8- 500 16- 250 30- 100	1-2000 (TORPEDO)	2-1500 1-2000T 5200	1162
B-26B-MA (-10 thru -20) B-26C-MD -5 thru 1st. 75(-30)	1) 1) 2) 2) 2) 2)	200 270 240 250 200 800 400	NOSE...FLEX. NOSE...FLEX. SIDE WAIST-FL. U.FUS.-PACKAGE L.FUS.-PACKAGE TAIL-POWER MT. UPPER TURRET	A S	A B O V E		1962
B-26B-MA -25 thru 1st. 150 (-50) B-26C-MD Last 125(-30)	A S	A B O V E		2-2000 2-1600 4-1000 6- 500 10- 250 20- 100	AS ABOVE	AS ABOVE	1162
B-26B-MA Last 50(-50) & -55 B-26F-1-MA B-26C-MD -15	1) 2) 2) 2) 2)	270 240 250 200 800 400	NOSE...FLEX. SIDE WAIST-FL. U.FUS.-PACKAGE L.FUS.-PACKAGE TAIL-POWER MT. UPPER TURRET	A S	A B O V E		AS ABOVE
111(B-10): AT-23A 1st. 109(B-15) " 3(C-25): AT-23B 71(C-30): AT-23B (C-35 & -40): AT-23B 1st. 26(C-45) "	ALL GUNS & ARMAMENT ITEMS REMOVED FROM THESE MODELS: MODIFIED FOR TOW TARGET USE & DESIGNATED AT-23A & B.			N	O N E		1962 3(C-25) 1162 (Balance)

NOTES: T-TORPEDO a SIDE WAIST GUNS ADDED TO LAST 111(-4) ONLY.  
\* B-26B-10, -15 & C-5 HAVE SAME TAIL GUN INSTALLATION & RDS./GUN AS B-26B-MA.

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**TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART**

PAGE 5  
AS OF:  
DATE: 20 FEB 1944

MODEL & BLOCK NO.	ENGINE & PROP.		SIZE		WT.		COMBAT CREW	FUEL		ARMAMENT			BOMBS-CARGO-PASS.		RADIO	REMARKS & REFERENCE
	NUMBER	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 L-COMBAT M-REC'D LIM R-WAR MAX.	TANK TYPE OR LOCATION		NO. TANKS & CAPACITY U.S. GAL.	NO. GUNS & CALIBER	RDS. PER GUN	LOCATION & TYPE	INTERNAL NO. & SIZE STATION	EXTERNAL NO. & SIZE OR CAPACITY	MAX. LOAD LB.		
B-26 B-MA B-2, 3 & 4	2	PRATT-WHITENEY R-2800-5 2 SPD. SUPERCH. CURTISS 13'6" DIA. - 1/4 HL. F.P. ELECTRIC	T 1850/ S L M 1850/ 2700 C 1500/ 7800 1150/13000	S 65'0" L 58'3" H 19'10" T 22'0" W 602 SQ. FT.	B 23500 C 35000 R 36500 W 36500	6	MAIN - WINGS AUX. - WINGS BOMB BAY (PORE)	2 x 360 2 x 121 2 x 250 1162 TOT	1-.30 1-.30 2-.50 2-.50	600 600 1500 400	NOSE - FLEX. TUNNEL - FLEX. TAIL-FLEX. MT. UPPER TURRET SIDE WAIST-FL.	2-2000 2-1600 4-1000 8- 500 15- 250 30- 100	1-2000 (TORPEDO) 2-1600 SEE (B) 5200 (B)	SEE (A)	FOR DETAILED ARMAMENT AND BOMB INSTALLATIONS SEE PAGE OPPOSITE.  TECHNICAL ORDER 01-358A-1. (5 MARCH 1943) * SIDE WAIST GUNS ADDED TO LAST 111 (-4) ONLY. * B-26B-MA HAS -5 ENGINE; B-26B-2-MA HAS -11 ENGINE & B-26B-3 & -4 HAS -13 ENGINE.	
B-26 B-MA -10 TO -20 INCL B-26 C-MO -5 TO -25 INCL	2	PRATT-WHITENEY R-2800-13 2 SPD. SUPERCH. CURTISS 13'6" DIA. - 1/4 HL. F.P. ELECTRIC	T 2000/ S L M 2000/ 1500 C 1600/ 13500 1150/14000	S 71'0" L 58'3" H 21'6" T 22'0" W 659 SQ. FT.	B 25300 C 37000 R 37500 W 38200 (C)	6	MAIN - WINGS AUX. - WINGS BOMB BAY (PORE & REAR)	2 x 360 2 x 121 4 x 250 1962 TOT	1) 2) .50 2) 2)	200 270 250 200 400 800	NOSE - FIXED NOSE - FLEX. SIDE WAIST-FL. U. PUS. - PACKAGE L. PUS. - PACKAGE UPPER TURRET TAIL-POWER MT.	A S A B O V E	A S A B O V E	AS ABOVE	TECHNICAL ORDER 01-358B-1. (25 DEC 1943) * B-26B-10; -15 & C-5 HAVE FLEX. TAIL MOUNT INSTEAD OF POWER MOUNT. * REG. GUN SAME AS B-26B-2-MA. * BASIC WEIGHT OF B-26B-15 IS 21,500 LB.	
B-26 B-MA -25 TO -55 INCL B-26 C-MO -30 & -45 INCL	2	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	6	MAIN - WINGS AUX. - WINGS BOMB BAY (PORE ONLY)	2 x 360 2 x 121 2 x 250 1162 TOT	A S A B O V E	A S A B O V E	2-2000 2-1600 4-1000 8- 500 15- 250 30- 100	A S A B O V E	A S A B O V E	NOTE (A) plus RC-103 & SCR-522	REFERENCE AS ABOVE * -FIXED NOSE GUN DELETED ON LATEST B-26B's and B-26C-15. * ALL MODELS EXCEPT 1st. 75 (B-26C-30) CARRY LESS BOMBS DUE TO DELETION OF 2 REAR BOMB BAYS. * RC-103 & SCR-522 ADDED TO LATER MODELS ONLY.	

COLUMN — 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

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										REMARKS ON PERFORMANCE					
	TO CLEAR 50'		GROUND-RUN		WEIGHT	STD. ALT.	MIL. POWER		MAX. CONTIN. POWER		TAKE OFF WEIGHT	BOMBS CARGO	TOTAL FUEL	MAX. CONTINUOUS POWER		MAX. CRUISE POWER		LONG RANGE								
	T.O. DIST.	LAND. DIST.	T.O. DIST.	LAND. DIST.			HIGH SPEED	RATE OF CLIMB	HIGH SPEED	RATE OF CLIMB				TIME TO CLIMB	AT 10000 FT.	AT 25000 FT.	AT 10000 FT.	AT 25000 FT.	RANGE	ENDUR.		RANGE	ENDUR.	RANGE	ENDUR.	
B-26 B-MA B-2, 3 & 4	24000	-	2300	110	-	1600	20000	270	300	265	200	26.5	34000	NONE	1162	950	3.5	-	-	-	-	-	-	2000	11.0	
B-26 B-MA -10 TO -20 INCL B-26 C-MO -5 TO -25 INCL	28000	-	2900	120	-	2100	15000	298	750	294	600	14.0	35500	1500	1162	900	3.5	-	-	-	-	-	-	1950	10.7	
B-26 B-MA -25 TO -55 INCL B-26 C-MO -30 & -45 INCL	32000	3250	3500	130	2350	2600	10000	291	1000	288	900	7.7	36000	2000T	1162	-	-	-	-	-	-	-	-	1900	10.5	
B-26 B-MA -10 TO -20 INCL B-26 C-MO -5 TO -25 INCL	35000	-	-	-	3950	-	5000	294	1150	283	#	3.4	35000	4000	962	550	2.2	-	-	-	-	-	-	1250	7.0	
B-26 B-MA -10 TO -20 INCL B-26 C-MO -5 TO -25 INCL	24000	-	1950	134	-	900	20000	-	-	-	-	-	38200	NONE	1962	1375	5.7	-	-	2325	11.3	-	-	2600	14.7	*MUST BE STRIPPED TO 38200 LB. FOR FERRYING.
B-26 B-MA -25 TO -55 INCL B-26 C-MO -30 & -45 INCL	28000	-	2200	135	-	1050	15000	282	-	-	-	-	36000	NONE	1162	1025	4.2	-	-	1725	8.4	-	-	1925	10.9	
B-26 B-MA -25 TO -55 INCL B-26 C-MO -30 & -45 INCL	32000	3050	3400	136	2000	1200	10000	278	-	271	550	11.2	37500	1500	1162	1000	4.1	-	-	1700	8.4	-	-	1850	10.5	
B-26 B-MA -25 TO -55 INCL B-26 C-MO -30 & -45 INCL	35000	3900	-	-	2600	-	5000	285	1000	269	#	1.1	38000	2000T	1162	-	-	-	-	-	-	-	-	-	-	-
B-26 B-MA -25 TO -55 INCL B-26 C-MO -30 & -45 INCL	36000	4400	-	-	2850	-	5000	270	1300	250	#	0.0	37000	4000	962	625	2.7	-	-	1075	5.3	-	-	1125	6.3	
B-26 B-MA -25 TO -55 INCL B-26 C-MO -30 & -45 INCL	38200	5100	-	-	3640	-	37000	A S	A B O V E	A B O V E	A B O V E	A B O V E	36000	NONE	1162	1025	4.2	-	-	1725	8.4	-	-	1925	10.9	
B-26 B-MA -25 TO -55 INCL B-26 C-MO -30 & -45 INCL	37500	1500	-	-	2600	-	37500	271	550	550	11.2	38000	2000T	1162	-	-	-	-	-	1700	8.4	-	-	1850	10.5	
B-26 B-MA -25 TO -55 INCL B-26 C-MO -30 & -45 INCL	38000	5100	-	-	3640	-	37000	270	1300	250	#	0.0	37000	4000	962	625	2.7	-	-	1075	5.3	-	-	1125	6.3	

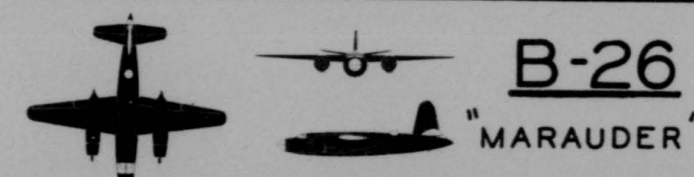
18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45

NOTES: (A) 24 VOLT RADIO SYSTEM  
SCR-211 FREQUENCY METER  
SCR-2690 RADIO COMPASS  
SCR-271W COMMAND SET  
SCR-287A LIAISON SET  
SCR-535 SET (or SCR-995 or SCR-695)  
SCR-578 EMERGENCY TRANSMITTER  
RC - 32 FILTER EQUIPMENT (or RC-196)  
RC - 36 INTERPHONE AMPLIFIER  
RC - 438 MARKER BEACON

RED FIGURES ARE PRELIMINARY; SUBJECT TO REVISION AFTER FLIGHT CHECK.  
\* MILITARY POWER AVAILABLE FOR 5 MINUTES ONLY.  
(B) TORPEDOS BEING USED IN LIMITED QUANTITIES ONLY; WITH MAXIMUM BOMB LOAD SHOWN TORPEDO MUST BE DROPPED FIRST.  
(C) LIMITED TO 36200 LB. BY FLYING CHARACTERISTICS.

GENERAL NOTES: SOME MODELS MODIFIED FOR TOW TARGET USE BY REMOVAL OF GUNS AND ARMAMENT ITEMS; FOR DETAILS SEE PAGE OPPOSITE. THESE MODELS HAVE BEEN DESIGNATED AT-23A & B.

MANUFACTURED BY MARTIN (Baltimore) "MA" & MARTIN (Omaha) "MO"



**B-26**  
"MARAUDER"

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**TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART**

PAGE 6  
AS OF:  
DATE 20 FEB. 1944

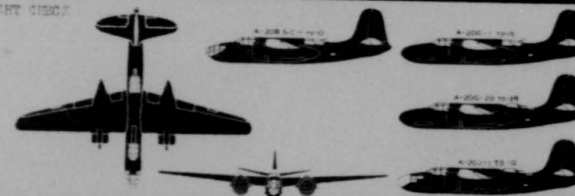
MODEL & BLOCK NO.	ENGINE & PROP.		SIZE		WT.	COMBAT CREW	FUEL		ARMAMENT			BOMBS-CARGO-PASS		RADIO	REMARKS & REFERENCE
	ENGINE MFR. MODEL SUPERCHARGER PROP MFR. TYPE	B.H.P./ALT. T-TAKE-OFF M-MILITARY C-CONTINUOUS	S-SPAN L-LENGTH H-HEIGHT T-TREAD W-WING AREA	B-BASIC C-COMBAT R-RECD LIM W-WAR MAX	TANK TYPE OR LOCATION		NO. TANKS & CAPACITY U.S. GAL.	NO. GUNS & CALIBER	RDS. PER GUN	LOCATION & TYPE	INTERNAL	EXTERNAL	MAX. LOAD LB.	TYPE	
											NO. & SIZE	NO. & SIZE			
A-20B-DL	WRIGHT R-2600-11 2 SPD. SUPERCH. HAMILTON STD. 11"3" DIA. - 3 BL. P.F. HYDROMATIC	T 1600/3000 M 1600/3000 C 1350/5500 1275/12000	S 61'4" L 48'0" H 18'1" T 17' W 465 SQ. FT.	B 15600 C 22000 R 25000 W 27000A	4	MAIN - WINGS FUSELAGE BOMB BAY	4 - 390 1 x 100 2 - 590 1080 TOT.	1-.30 2-.30 1-.50 2-.50	500 1000 200	TUNNEL - FLEX. L-4R. RACELLES REAR COCKPIT NOSE - FIXED	1-1000 1-500 4-250 10-100	(SEE C) 1-2000T 1-500 1-250 1-100	1000	SCR-27LN SCR-535 FM - 26C RC - 51	TECHNICAL ORDER 01-1040-1. (1 DEC. 1942) SOME MODELS ONLY.
A-20C-DO -I TO -10 INCL.	AS ABOVE EXCEPT P/R CHANGE TO R-2600-23 ENGINE	T 1600/3000 M 1600/1000 C 1350/5000 1275/11500	S 61'4" L 47'11" H 18'1" T 17' W 465 SQ. FT.	B 16300 C 23000 R 25200 W 27000A	4	INBD. WINGS OUTBD. WINGS FUS. (BOMB BAY) BOMB BAY (SEE B)	2 x 136 2 x 64 2 x 70 4 - 580 1080 TOT.	1) 2) .30 4) a	500	TUNNEL - FLEX. REAR COCKPIT NOSE - FIXED	4-500 4-250 4-100	(SEE C) 1-2000 T	2000	AS ABOVE	TECHNICAL ORDER 01-1040-1. (10 FEB. 1942) NO TORPEDO PROVISIONS ON A-20C-1. FOR ALTERNATE INSTALLATIONS SEE EE-306-A.
A-20G-DO -I TO -15 INCL.	AS ABOVE	AS ABOVE	AS ABOVE	B 17200 C 24000 R 25200 W 27000A	3	AS ABOVE	2 x 136 2 x 64 3 - 325 1 x 374 1099 TOT.	1) .30 or 1) .50 2) .50 6) .50	500 500 350	TUNNEL - FLEX. REAR COCKPIT NOSE - FIXED	AS ABOVE	(SEE C) 1-2000 T	AS ABOVE	SCR-27LN SCR-535A SCR-695A MN - 26Y RC - 36 RC - 198	TECHNICAL ORDER 01-1040-1. (30 JULY 1943) ARMAMENT FOR A-20G-1 IS (2) .50 CAL. FIXED NOSE GUNS OF 350 RDS. EACH & (4) 20MM NOSE CANNON, TYPE M2 OF 60 RDS. EACH; MAJORITY ALLOCATED TO FOREIGN POWER.
A-20G-DO -20 TO -35 INCL.	AS ABOVE	AS ABOVE	AS ABOVE	B 17700 C 26000 R 26000 W 27000A	3	INBD. WINGS OUTBD. WINGS FUS. (BOMB BAY) DRIP - EXT. (SEE B)	2 x 136 2 x 64 3 - 325 1 x 374 1099 TOT.	1) .30 2) .50 6) .50	400 400 350	TUNNEL - FLEX. UPPER TURRET NOSE - FIXED	AS ABOVE	(SEE C) 1-2000 T 4-500 4-250 4-100	4-500 4-500 x 1000	SCR-27LN SCR-535A SCR-695A MN - 26Y RC - 36 RC - 198	REFERENCE AS ABOVE
A-20J-DO -I TO -10 INCL.	AS ABOVE	AS ABOVE	AS ABOVE	B 17800 C 26000 R 26000 W 27000A	4	AS ABOVE	AS ABOVE	1) .30 2) .50 2)	400 400 350	AS ABOVE	AS ABOVE	(SEE C) 1-2000 T 4-500 4-250 4-100	AS ABOVE	SCR-27LN SCR-535A SCR-695A MN - 26G RC - 36 RC - 198	TECHNICAL ORDER

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										REMARKS ON PERFORMANCE					
	GROSS WEIGHT LB.	TO CLEAR 50' DIST.		LANDING SPEED M.P.H.	GROUND-RUN		WEIGHT LB.	STD. ALT. FT.	MIL. POWER M.P.H.	RATE OF CLIMB FT./MIN.	HIGH SPEED M.P.H.	RATE OF CLIMB FT./MIN.	TIME TO CLIMB MIN.	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.							
		FT.	FT.		FT.	FT.											MILES	HOURS	MILES	HOURS	MILES	HOURS		MILES	HOURS	MILES	HOURS	
A-20B-DL	17000 19000 22000 24000 27000	2800 4000 4650 5300 6500	2700 3000 3150 3250 3500	98 105 109 113 117	1500 1650 1900 2000 2100	22000	25000 20000 15000 10000 5000	277 303 315 317 303	370 900 1125 1430 2125	277 300 312 310 297	290 775 1275 148 284	22.6 13.2 6.3 4.8 2.3	23800 21000	NONE 1000	1080 490	850 300	3.3 1.4	1190 500	4.9 2.1	1500 600	7.0 2.7	- -	- -	2100 900	13.4 6.0			
A-20C-DO -I TO -10 INCL.	18000 20000 23000 25000 27000	3200 4400 5300 6500	3150 3250 3500 3500	98 109 113 117	1600 1750 2000 2000 2100	23000	25000 20000 15000 10000 5000	275 302 317 319 306	300 900 1320 1750 1990	274 298 312 313 301	270 720 1200 150 287	23.7 13.0 6.7 5.0 2.4	24500 21500	NONE 1080	1080 540	875 350	3.3 1.5	- -	1500 675	6.6 3.1	- -	- -	2300 1000	12.0 6.5				
A-20G-DO -I TO -15 INCL.	19000 21000 24000 26000 27000	3600 4850 5700 6500	3250 3500 3500 3500	95 102 113 117	1650 1850 2100 2100 2100	24000	25000 20000 15000 10000 5000	275 302 317 319 306	360 900 1260 1680 1860	274 298 312 312 301	270 720 1200 1120 287	23.7 13.0 6.7 5.3 2.5	25300 24000 24000	NONE 2000 2000T	1080 540 540	975 150 125	3.5 1.7 1.7	1650 750 650	6.8 3.1 3.0	1700 900 700	7.3 3.4 3.3	2000 900 -	9.1 4.1 -	2300 1100 950	12.4 6.0 5.7			
A-20G-DO -20 TO -35 INCL.	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	26000	25000 20000 15000 10000 5000	271 291 311 317 306	360 900 1125 1500 1750	274 298 307 306 299	270 720 975 1250 287	23.7 13.0 6.7 5.1 2.6	26200 26000 26000 26000	NONE 2000 2000T 4000	1099 725 725 400	900 625 575 300	3.5 2.3 2.3 1.2	- *750 *285 *125	- *4.3 *4.3 *2.0	1625 1075 975 525	7.3 4.6 4.5 2.3	- *1250 *575 *550	- *5.7 *2.5	2000 1300 1175 650	11.2 6.6 6.7 3.3	* FLIGHTS ABOVE 10000 FT. REQUIRE SPECIAL PROVISIONS FOR OXYGEN.		
A-20J-DO -I TO -10 INCL.	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	26000	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

NOTES: (A) CRITICAL FLIGHT CHARACTERISTICS RESULT ABOVE 27000 LB.  
(B) FUSELAGE TAKES ARE CARRIED IN BOMB BAYS WITHOUT AFFECTING BOMB LOAD CAPACITY.  
(C) PROVISIONS ONLY, FOR TORPEDO: A-20 SERIES NOT BEING USED FOR TORPEDO MISSIONS AS PER MILITARY REQUIREMENTS POLICY NO. 37 DATED JULY 3, 1943.  
RANGE VALUES WITH TORPEDO ARE SHOWN FOR COMPARATIVE REFERENCE.

RED FIGURES ARE PRELIMINARY; SUBJECT TO REVISION AFTER FLIGHT CHECKS  
\* MILITARY POWER AVAILABLE FOR 5 MINUTES ONLY.

T TORPEDO (REPLACES INTERNAL BOMBS WHEN CARRIED)  
x EXTERNAL



**A-20**  
"HAVOC"

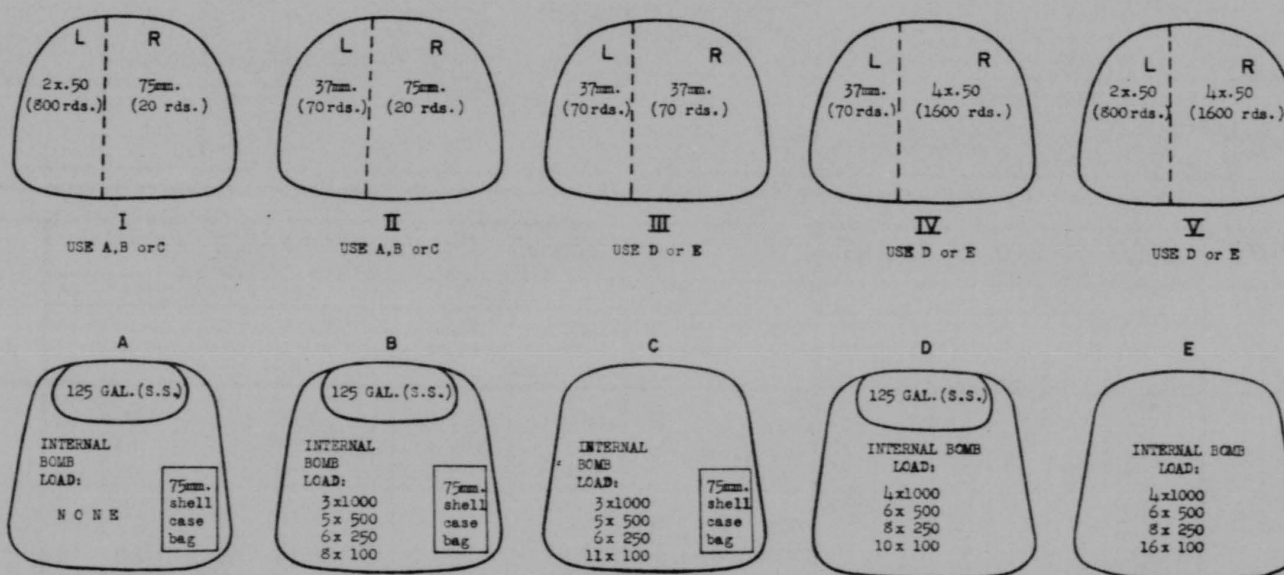
MANUFACTURED BY DOUGLAS (SANTA MONICA) "DO"  
(LONG BEACH) "DE"

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**ALL PURPOSE NOSE**  
(VIEWED FROM REAR)



S.S. - SELF SEALING

THE EXTERNAL BOMBS (EXCEPT TORPEDOES) ARE CARRIED ON WING RACKS. THE WING GUN PACKAGES ARE ALSO MOUNTED AT THE SAME WING RACK STATIONS; THEREFORE THE WING GUNS AND EXTERNAL WING BOMBS ARE ALTERNATE INSTALLATIONS.

**BOMB BAY**  
(VIEWED FROM REAR)

**A-26B**

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PAGE 7  
AS OF: \_\_\_\_\_  
DATE 20 FEB 1944

TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART																		
MODEL & BLOCK NO.	ENGINE & PROP.		SIZE		WT.	COMBAT CREW	FUEL		ARMAMENT			BOMBS-CARGO-PASS.			RADIO	REMARKS & REFERENCE		
	NUMBER	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	RDS PER GUN	LOCATION & TYPE	INTERNAL NO. & SIZE	EXTERNAL NO. & SIZE			MAX. LOAD LB.	TYPE
A-26B-DL -1 & -5	2	FRATT-WELBNEY R-2800-27 SINGLE ST.-2 SPD. HAMILTON STD. 12 1/2" DIA. - 3 1/2" P.P. HYDRA-MATIC	M 2000/1500 C 1600/12000 1160/11000	S 70' L 50'6" H 18'6" T 19'6" W 54.0 SQ. FT.	B 25100 C 33700 R 34000 W 37000	2 3	MAIN - WINGS 2x300 AUX. - WINGS 2x100 BOMB BAY(S) 1x125 B. BAY (PERRY) 1x675 1600 TOT	1-75MM 2-.50 2-.50 8-.50	20 500 500 300	NOSE - CANNON UPPER TURRET LOWER TURRET WINGS-PACKAGE	b 4-1000 b 6-500 b 8-250 b 16-100	b 2-2000 T b 1-500 b 1-250 b 1-100	1-1000 1-500x b 6000	SCR-27LN SCR-595 MN - 25C RC - 36	a-PARTS WILL BE PROCURED FOR SERVICE INSTALLATION OF ALL PURPOSE NOSE AS SHOWN ON PAGE OPPOSITE. b-ONLY CARRIED WHEN 75MM CANNON CASE CONTAINER IS MOUNTED. c-NORMAL CREW OF 2; CREW OF 3 WITH 75MM CANNON ONLY. d-NO SELF SEALING BOMB BAY TANK ON A-26B-1-DM ONLY.			
A-26B-DL -10 & SUBSQ.	2	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE EXCEPT FOR ALTERNATE ALL PURPOSE NOSE INSTALLATIONS AS SHOWN ON PAGE OPPOSITE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	REFERENCE AS ABOVE			

COLUMN — 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

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										REMARKS ON PERFORMANCE		
	GROSS WEIGHT LB.	TO CLEAR 50'		LANDING SPEED MPH	GROUND-RUN		WEIGHT LB.	STD ALT. FT.	MIL. POWER		MAX. CONTIN. POWER		TAKE OFF WEIGHT LB.	BOMBS CARGO PASS. LB.	TOTAL FUEL U.S. GAL.	MAX. CONTINUOUS POWER		MAX. CRUISE POWER		LONG RANGE			
		T.O. DIST. FT.	LAND. DIST. FT.		T.O. DIST. FT.	LAND. DIST. FT.			HIGH SPEED MPH	RATE OF CLIMB FT./MIN.	HIGH SPEED MPH	RATE OF CLIMB FT./MIN.				TIME TO CLIMB MIN.	AT 10000 FT.	AT 25000 FT.	AT 10000 FT.	AT 25000 FT.		AT 10000 FT.	AT 10000 FT.
		RANGE MILES	ENDUR. HOURS		RANGE MILES	ENDUR. HOURS			RANGE MILES	ENDUR. HOURS	RANGE MILES	ENDUR. HOURS				RANGE MILES	ENDUR. HOURS	RANGE MILES	ENDUR. HOURS				
A-26B-DL -1, -5 & SUBSQ.	25000 29000 32000 33000 34000 36000	- 2900 3700 1000 1300 1850	2650 2950 3200 3250 -	96 104 109 111 -	1750 2000 2150 2250 -	33700	20000 15000 10000 5000 S L	320 330 324 332 312	300 750 1150 1500 2050	313 320 313 306 285	120 160 200 2.9 0.0	30.4 11.4 7.9 2.9 0.0	1600 33700 36700 3000 1000	NONE NONE 3000 3000 1000	1600 925 925 800	- - - - -	- - - - -	- - - - -	- - - - -	- - - - -	3200 1650 -	16.4 8.5 -	* STRIPPED TO 34000 LB. FOR PERRYING

18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45

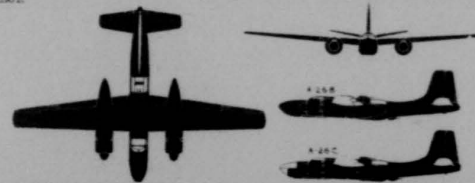
NOTES:

RED FIGURES ARE PRELIMINARY; SUBJECT TO REVISION AFTER FLIGHT CHECK

\* MILITARY POWER AVAILABLE FOR 5 MINUTES ONLY.

x EXTERNAL

T TORPEDO



A-26

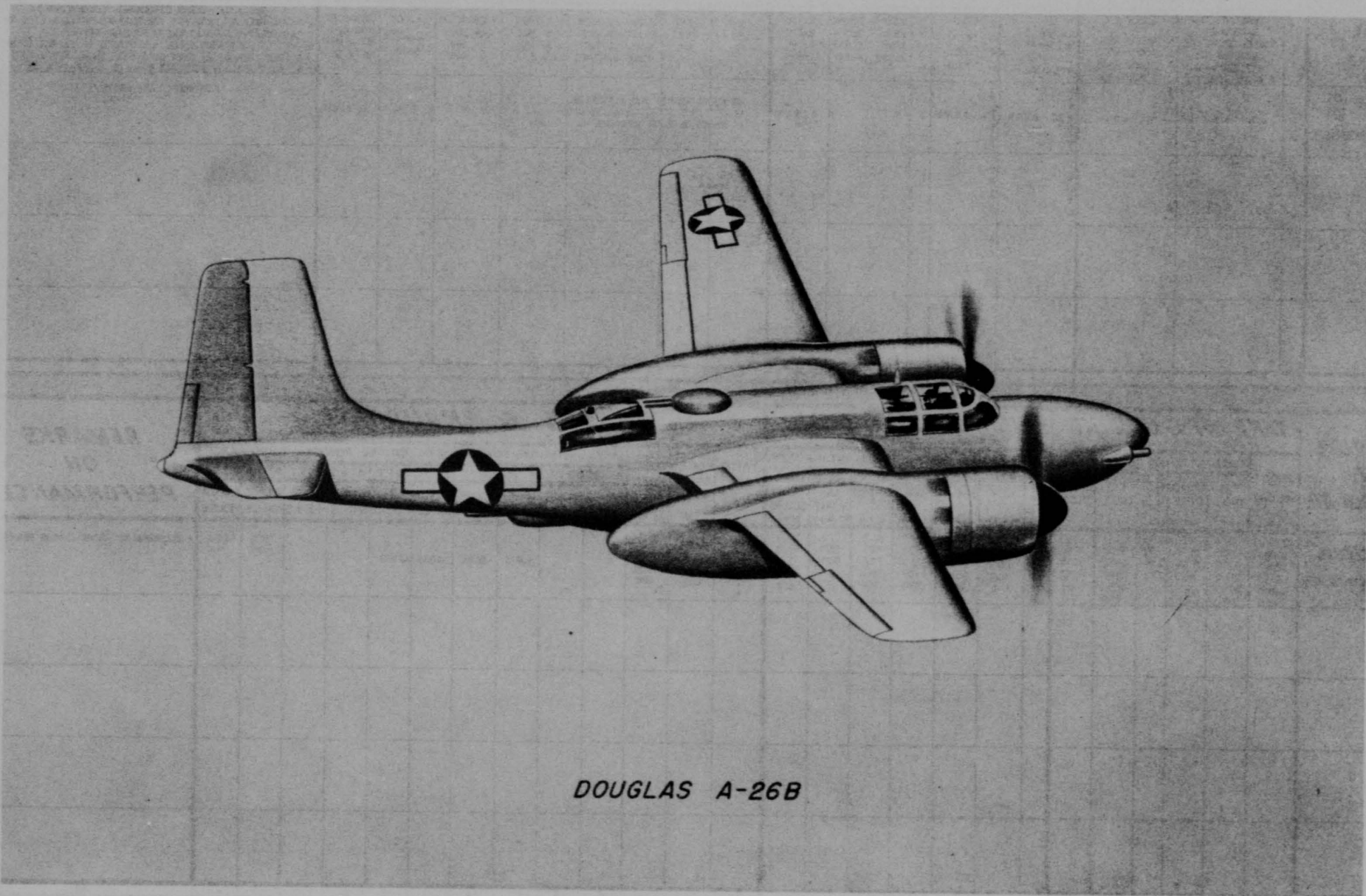
"INVADER"

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MANUFACTURED BY DOUGLAS (Long Beach) "DL" and DOUGLAS (Tulsa) "DT"

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DOUGLAS A-26B

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**TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART**

PAGE 8  
15 OF 15  
DATE 20 DEC 1943

MODEL & BLOCK NO.	ENGINE & PROP.	SIZE	WT.	COMBAT CREW	FUEL		ARMAMENT			BOMBS-CARGO-PASS			RADIO	REMARKS & REFERENCE	
					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
A-36 A-NA	ALLISON V-1710-27 SINGLE SPEED CURTISS 10"9" DIA. - 3 BL. CONST. SPD. SUBST.	T 1325/ S L M 1325/51400 C 1100/6600	S 37' 0" L 32' 3" H 12' 2" T 11' 10" W 233 sq. ft.	B 7100 C 10000 R 10700 W -	1	MAIN - WING EXT. - WINGS	2 x 90 2 x 75 or 2 x 150 L80 TOT.	2-50 4-50	200 200	NOSE - FIXED WING - FIXED	NONE	2-500 2-250	1000	SCR-27LN SCR-535 or SCR-595**	TECHNICAL ORDER 01-608B-1. ( 10 JULY 1943) ** WAR EMERGENCY RATING. ** LAST 599 ONLY.

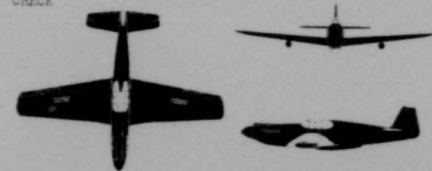
COLUMN — 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

MODEL & BLOCK NO.	TAKE OFF & LANDING						HIGH SPEED & CLIMB						RANGE & ENDURANCE										REMARKS ON PERFORMANCE		
	HARD SURFACE - NO WIND						AT NORMAL COMBAT WEIGHT						STATUTE AIR MILES - NO WIND - NO ALLOWANCE FOR RESERVE												
	TO CLEAR 50'		LAND. DIST.	LANDING SPEED	GROUND-RUN		STD. ALT.	MIL. POWER		MAX. CONTIN. POWER		TAKE OFF WEIGHT	BOMBS CARGO-PASS.	TOTAL FUEL	MAX. CONTINUOUS POWER		MAX. CRUISE POWER		LONG RANGE						
	T.O. DIST.	FT.			T.O. DIST.	FT.		HIGH SPEED	RATE OF CLIMB	HIGH SPEED	RATE OF CLIMB				TIME TO CLIMB	AT 10000 FT.	AT 25000 FT.	AT 10000 FT.	AT 25000 FT.	AT 10000 FT.	ENDUR.	RANGE		ENDUR.	RANGE
A-36 A-NA	9000	2800	3000	-	2050	2100	20000	288	500	277	300	16.6	11000	NONE	480	1400	5.6	-	-	-	-	-	-	2100	10.4
	10000	3400	3500	-	2600	2400	15000	295	1025	285	1	9.1	10000	NONE	330	1000	3.8	-	-	-	-	-	-	1500	7.7
	11000	4100	-	-	3200	-	10000	305	1525	293	1	5.1	9000	NONE	180	550	2.0	-	-	-	-	-	-	850	3.9
							5000	310	2075	293	1	2.4	10000	1000	180	500	2.0	-	-	-	-	-	-	800	3.7
							S L	295	2200	275	1	-													

18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45

NOTES:

RED FIGURES ARE PRELIMINARY; SUBJECT TO REVISION AFTER FLIGHT CHECK  
/ MILITARY POWER AVAILABLE FOR 15 MINUTES.



**A-36**  
"MUSTANG"

MANUFACTURED BY NORTH AMERICAN (Inglewood) "NA"

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TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART																	PAGE 9	
MODEL & BLOCK NO.	ENGINE & PROP.		SIZE		WT.	COMBAT CREW	FUEL		ARMAMENT			BOMBS-CARGO-PASS.		RADIO	REMARKS & REFERENCE			
	ENGINE MFR. MODEL	B.H.P./ALT.	S-SPAN	L-LENGTH			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		
																	T-TAKE-OFF	M-MILITARY
C-46A-CU -1 TO -30 INCL.	PRATT-WHITELEY R-2800-51 2 SPEED CURTISS 13'6" DIA. - 4 BL. P.F. ELECTRIC	T 2000/ S L	S 108'0"	L 76'4"	B 32100	3	WING-PANELS FUSELAGE	6 - 1100 8 x 100	N O N E		FORE-BELLY APT-BELLY MAIN-CABIN TROOPS	3700 1800 10000 or 50	15000	SCR-211, 269, 271A, 287, 518, 578 & 695. RC-36, 143, 105 & 198. AN/ARR-1	TECHNICAL ORDER 01-251A-1. (REVISION IN PROGRESS) * EARLY MODELS HAVE HAMILTON STD. 36LAIN, HYDROMATIC, 15'1" DIA. PROPELLER. ** MISC. RADIO CARRIED. MAX. COMBINATION SHOWN. NOTE: EARLY MODELS LIMITED TO 40000# GROSS WEIGHT & HAVE SMALL CARGO DOOR.			
C-47-DL C-47A TO -80-DL C-47A TO -10-DK C-53, C & D-DL	PRATT-WHITELEY R-1830-92 INTEGRAL SUPER. HAMILTON STD. 11'7" DIA. - 3 BL. P.F. HYDROMATIC	T 1200/ S L	S 95'0"	L 64'6"	B 18000	3	MAIN - WING AUX. - WING FUSELAGE	2 x 202 2 x 200 8 x 100	N O N E		CARGO or TROOPS or LITTERS	6000 27 18	6000 NOB. 10000 MAX. 11000 MAX.	SCR-211, 269, 271A, 287, 522, 578, 579, 695, 80-36, 143, 105, 198. AN/ARR-1	TECHNICAL ORDER 01-1408-1. * MISC. RADIO CARRIED; MAX. COMBINATION SHOWN. (AN/APN-2 ON SOME MODELS) C-47, C-53 & C-53C INSTALLED WITH 12VOLT SYSTEM; OTHERS WITH 24 VOLT SYSTEM. NOTE: C-47 & C-53 SERIES SIMILAR EXCEPT FOR LARGE CARGO DOOR ON C-47. THE C-53 CARRIES 24 PASSENGERS.			
C-54A DO DC	PRATT-WHITELEY R-2000-3 or -7 2 SPEED HAMILTON STD. 13'1" DIA. - 3 BL. P.F. HYDROMATIC	T 1290/ S L	S 117' 6"	L 93'10"	B 37000	6	INBD. - WING OUTBD. - WING FUSELAGE	2 x 508 2 x 435 4 x 144	N O N E		FORE-BELLY APT-BELLY FORE-CARGO APT-CARGO TROOPS	1800 2100 21000 11900	25000	SCR-211, 269, 271A, 287, 578, 595/695. RC-36, 143, 105, 198.	TECHNICAL ORDER 01-1408-1. * MISC. RADIO CARRIED. MAX. COMBINATION SHOWN. NOTE: 30 TROOPS WITH FUSELAGE TANKS (3712 GAL.) 50 TROOPS WITHOUT FUSELAGE TANKS (1886 GAL.)			
C-60A-LO -1 & -5	WRIGHT R-1820-37 2 SPEED HAMILTON STD. 10'6" DIA. - 3 BL. P.F. HYDROMATIC	T 1200/ S L	S 65' 8"	L 49'10"	B 13000	3	FRONT - WING REAR - WING AUX. -	2 x 150 2 x 172 3 x 134	N O N E		BELLY CABIN or PARATROOPS	3100 6600 or 18	8500	SCR-211, 269, 271A, 287, 578, 595, RC-36, 143, 105, 198.	TECHNICAL ORDER 01-750B-1. * MISC. RADIO CARRIED. MAX. COMBINATION SHOWN. EARLIER MODELS CARRY SCR-535 IN PLACE OF SCR-695. ** 1200 LB. BALLAST REQUIRED IN NOSE TO BALANCE PARATROOPS.			
C-87-CF	PRATT-WHITELEY R-1830-13 TURBO HAMILTON STD. 11'7" DIA. - 3 BL. P.F. ELECTRIC	T 1200/ S L	S 110'0"	L 66'4"	B 34250	5	INBD. - WING OUTBD. - WING	12 - 2364 6 - 150	1 - 50 500 TAIL - FLEX. (ON SOME MODELS ONLY)		CHAIRS or LITTERS & BENCH	20 or 7 11	11000 NOB. 10000 MAX.	SCR-271A, 287, 269, 578 & 695. RC - 36 RC - 43	TECHNICAL ORDER 01-50A-1. (PRELIMINARY DATA) A CARGO VERSION OF B-21, MODEL: SILHOUETTE VIEW APPROX. AS B-21. * RESTRICTED MAXIMUM ALLOWABLE GROSS WEIGHT.			

MODEL & BLOCK NO.	TAKE OFF & LANDING						HIGH SPEED & CLIMB						RANGE & ENDURANCE										REMARKS ON PERFORMANCE		
	HARD SURFACE - NO WIND						AT NORMAL COMBAT WEIGHT						STATUTE AIR MILES-NO WIND-NO ALLOWANCE FOR RESERVE												
	GROSS WEIGHT LB.	TO CLEAR 50 FT. DIST. FT.	LAND. DIST. FT.	LANDING SPEED MPH	T.O. DIST. FT.	LAND. DIST. FT.	WEIGHT LB.	STD. ALT. FT.	MIL. POWER HIGH SPEED MPH	RATE OF CLIMB FT/MIN.	MAX. CONTIN. POWER HIGH SPEED MPH	RATE OF CLIMB FT/MIN.	TIME TO CLIMB MIN.	TAKE OFF WEIGHT LB.	BOMBS-CARGO-PASS. LB.	TOTAL FUEL U.S. GAL.	MAX. CONTINUOUS POWER AT 10000 FT. RANGE ENDUR. MILES	MAX. CRUISE POWER AT 25000 FT. RANGE ENDUR. MILES	AT 10000 FT. RANGE ENDUR. MILES	AT 25000 FT. RANGE ENDUR. MILES	LONG RANGE AT 10000 FT. RANGE ENDUR. MILES				
C-46A-CU -1 TO -30 INCL.	31000 39000 46000 50000	- 2700 1250 2300	1800 2000 2250 2500	- - - -	1150 1300 1500 -	16000	20000 15000 10000 5000 S L	288 780 900 900 1300	258 265 294 295 210	400 650 750 900 900	28.4 18.6 11.6 5.5 -	51000 47000 47000 51000	2000 1400 6000 10000	2200 1100 5000 10500	1400 850 630 620	5.5 3.5 2.5 2.5	- - - -	2600 1650 1150 1100	12.3 7.5 5.5 5.5	- - - -	3200 2150 1550 1200	16.0 10.5 7.8 6.3	NOTE: x HIGH SPEED IN PRELIMINARY TEST - 264 MPH AT 13000 FT. ALTITUDE & 38200 LB. GROSS WT.		
C-47-DL C-47A TO -80-DL C-47A TO -10-DK C-53, C & D-DL	21000 23000 26000 29000	1850 2100 2400 3200	2100 2300 2600 2800	66 69 73 80	1300 1400 1600 -	26000	20000 15000 10000 5000 S L	201 217 217 302 187	180 150 720 920 -	37.0 20.0 11.0 5.0 -	29000 26000 29000	NONE 2000 6000	1600 1000 804	1500 950 750	7.6 4.7 3.7	ABOVE PRAC-TICAL CRUISE-ING CEILING	2300 1150 1100	13.0 7.9 6.2	ABOVE PRAC-TICAL CRUISE-ING CEILING	3100 2050 1550	19.3 12.7 10.0	* MAX. PERMISSIBLE LEVEL FLIGHT SPEED FOR 29000 LB. ** 6000 LB. CARGO or 27 TROOPS.			
C-54A DO DC	45000 55000 59000 62500 65000	- 2800 3300 3950 4350	2900 3100 3400 -	80 90 -	1800 2200 -	58000	20000 15000 10000 5000 S L	- - - 272 260	269 278 276 260 245	425 800 1000 1100 1050	24.4 16.0 9.4 4.4 -	62500 65000 59000 65000	NONE 8000 8000 11000	3742 2814 1886 1886	EXCESSIVE SPEED LIMITS	AS AS AS	ABOVE ABOVE ABOVE	3100 2500 1600 1550	16.2 12.0 7.7 7.7	AS AS AS	ABOVE ABOVE ABOVE	4100 1900 1800	26.0 17.1 11.7 10.2	* 8000 LB. CARGO or 30 TROOPS & 2000 LB. EQUIPMENT. ** 11000 LB. CARGO or 50 TROOPS & 4000 LB. EQUIPMENT.	
C-60A-LO -1 & -5	14000 17500 18500 21500 23000	- 1800 2050 2950 3300	2150 2600 2700 -	61 68 70 -	1700 2100 2200 -	21500	20000 15000 10000 5000 S L	259 269 260 255 238	650 1300 1400 1600 1600	255 1000 1200 -	19.0 11.0 7.0 3.0 -	21500 23000	1150 5000	1046 644	1000 600	4.5 2.7	AS AS	ABOVE ABOVE	1150 850	7.0 4.3	AS AS	ABOVE ABOVE	2300 1200	14.4 7.7	* SPEED RESTRICTED IN LEVEL FLIGHT. ** 5000 LB. CARGO or 18 PARATROOPS & 1200 LB. BALLAST IN NOSE.
C-87-CF	40000 50000 56000 60000	- 3500 4750 6000	3300 3900 4250 -	90 100 105 -	2800 3300 3550 -	56000	30000 25000 20000 15000 10000 5000	302 317 301 287 273 299	600 1050 1100 1150 1200 1200	395 850 209 950 269 295	31.0 26.8 20.9 15.3 9.0 4.2	52900 56000 56000 60000	NONE 3100 5800 9800	2814 1205 2364 2364	1215 1205 1000 975	4.6 4.6 3.8 3.7	1385 1375 1135 1100	4.6 3.8 3.8 3.8	2635 2550 2300 1975	11.7 11.4 9.4 8.9	2835 2750 2235 2165	11.0 10.8 8.9 8.6	3365 3245 2650 2500	17.0 16.2 13.1 12.3	

NOTES:

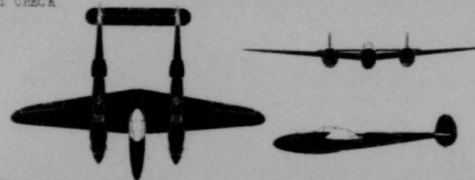
MANUFACTURERS				
C-46A - CURTISS	C-47A - DOUGLAS	C-53, C & D - DOUGLAS	C-54A - DOUGLAS	C-60A - LOCKHEED

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TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART																	
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MODEL & BLOCK NO.	ENGINE & PROP.		SIZE		WT.		COMBAT CREW	FUEL		ARMAMENT			BOMBS-CARGO-PASS.		RADIO	REMARKS & REFERENCE	
	NUMBER	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	RDS. PER GUN	LOCATION & TYPE	INTERNAL NO. & SIZE OR STATION	EXTERNAL NO. & SIZE OR CAPACITY	MAX. LOAD LB.	TYPE		
P-38F-LO	2	ALLISON V-1710-19 & -53 TURBO CURTISS 11'6" DIA. - 3BL. F.F., ELECTRIC	T 1225/8 L M* 1150/27000 C 1000/27000	S 52' 0" L 37' 10" H 12' 10" T 16' 6" W 328 SQ. FT.	B 13000 C 15300 R 20000 W -	1	MAIN - WINGS RES. - WINGS	2 x 90 2 x 60 300 TOT.	1-20MM. 4-.50	150 500 (MAX.)	NOSE-TYPE M1 NOSE-FIXED	NONE	NONE	2-1000 2-500 2-325 2-250 2-100	SCR-183 or SCR-27LN	TECHNICAL ORDER 01-75FB-1. (REV. 15 JAN. 1943) * LIMITED TO 1150 HP. BECAUSE OF INADEQUATE COOLING.	
P-38F-LO -1 TO -15 INCL.	2	AS ABOVE	AS ABOVE	AS ABOVE	B 13600 C 15900 R 20000 W -	1	MAIN-WINGS RES.-WINGS DROPP.-EXTER.	2 x 90 2 x 60 2 x 75 2 x 150 600 TOT.	A S	A B O V E	NONE	NONE	2-1000 2-500 2-325 2-250 2-100	SCR-27LN* SCR-515** SCR-522 SCR-535	REFERENCE AS ABOVE ** PROVISIONS ONLY. ** SPACE ONLY.		
P-38G-LO -1 TO -15 INCL.	2	ALLISON V-1710-51 & -55 TURBO CURTISS 11'6" DIA. - 3BL. F.F., ELECTRIC	T 1225/8 L M* 1150/27000 C 1100/24,000	AS ABOVE	B 13500 C 15800 R 20000 W -	1	AS ABOVE EXCEPT THAT LAST 200 P-38G-10'S ARE SAME AS BELOW	2 x 90 2 x 60 2 x 75 2 x 150 600 TOT.	A S	A B O V E	AS ABOVE EXCEPT LAST 200 P-38G-10'S ONLY ARE SAME AS BELOW	NONE	2-1000 2-1000 2-500 2-325 2-250 2-100	SCR-27LN* SCR-515** SCR-522 SCR-535 SCR-605***	REFERENCE AS ABOVE * LIMITED TO 1150 HP. BECAUSE OF INADEQUATE COOLING. ** PROVISIONS ONLY. ** SPACE ONLY. *** LAST 179 P-38G-10'S ONLY.		
P-38H-LO -1 & -5	2	ALLISON V-1710-89 & -91 TURBO CURTISS 11'6" DIA. - 3BL. F.F., ELECTRIC	T 1425/8 L M* 1425/25000 C 1100/25000	AS ABOVE	B 13700 C 16300 R 21000 W -	1	MAIN-WINGS RES.-WINGS DROPP.-EXTER.	2 x 90 2 x 60 2 x 75 2 x 150 2 x 300 900 TOT.	1-20MM. 4-.50	150 500 (MAX.)	NOSE-AN-M20C NOSE - FIXED	NONE	2-1000 2-1000 2-500 2-325 2-250 2-100	SCR-27LN* SCR-515** SCR-522 SCR-535 SCR-605***	TECHNICAL ORDER 01-75FF-1. (25 SEPT. 1943) * LIMITED TO 1240 HP. BECAUSE OF INADEQUATE COOLING. ** PROVISIONS ONLY. ** SPACE ONLY.		
COLUMN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

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										REMARKS ON PERFORMANCE					
	GROSS WEIGHT LB.	TO CLEAR 50' DIST.		LANDING SPEED MPH	GROUND-RUN		WEIGHT LB.	STD. ALT. FT.	MIL. POWER		MAX. CONTIN. POWER			TAKE OFF WEIGHT LB.	BOMBS CARGO PASS. LB.	TOTAL FUEL U.S. GAL.	MAX. CONTINUOUS POWER		MAX. CRUISE POWER			LONG RANGE				
		T.O. FT.	LAND. FT.		T.O. FT.	LAND. FT.			HIGH SPEED MPH.	RATE OF CLIMB FT./MIN.	HIGH SPEED MPH.	RATE OF CLIMB FT./MIN.	TIME TO CLIMB MIN.				AT 10000 FT.	AT 25000 FT.	AT 10000 FT.	AT 25000 FT.		RANGE MILES.	ENDUR. HOURS.	RANGE MILES.	ENDUR. HOURS.	RANGE MILES.
P-38F-LO	13500 15000 15800	- 2150 2300	2750 2980 -	85 90 -	- 1280 1380	1450 1580 -	13500 15000 10000 5000	25000 20000 15000 10000 5000	390 380 365 355 340	2100 2300 2500 2700 2900	380 365 353 340 328	11.0 8.0 6.0 4.0 2.0	15800	NONE	300	400	1.3	425	1.3	700	2.7	675	2.4	900	4.5	
P-38F-LO -1 TO -15 INCL.	13500 15000 15500 17500 19900	- 2150 2270 3040 4000	2750 2980 3050 3350 -	85 90 91 97 -	- 1280 1360 1830 2400	1450 1580 1620 1800 -	13500 15000 10000 5000	25000 20000 15000 10000 5000	395 390 376 351 347	2100 2300 2450 2600 2800	380 367 354 340 327	12.0 8.8 6.0 4.0 1.8	19900 18000 15900 17000 18000	NONE NONE NONE 1000 2000	900 600 300 300 300	1375 800 400 385 375	5.0 2.9 1.3 1.3 1.3	1450 850 400 395 375	5.0 2.9 1.3 1.3 1.3	2050 1100 700 675 625	9.3 6.1 2.7 2.8 2.8	2050 1125 685 650 600	8.6 5.4 2.4 2.4 2.3	2300 1750 900 850 800	5.0 9.1 4.5 4.3 4.1	
P-38G-LO -1 TO -15 INCL.	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	13600 20000 15000 10000 5000	25000 20000 15000 10000 5000	400 390 375 360 345	1700 2300 2500 2600 2800	390 377 362 347 333	11.5 8.5 5.9 3.7 1.8	SUBSTANTIAL	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-38H-LO -1 & -5	13600 15500 17500 19500 20300	- 2000 2600 3500 4000	2750 3050 3500 -	86 93 100 -	- 1200 1600 2300	1450 1600 2000 -	13500 15000 10000 5000	25000 20000 15000 10000 5000	402 387 372 360 345	1700 2300 2500 2600 2800	390 375 360 348 332	9.7 7.6 5.5 3.5 1.8	20300 18300 16300 18300 19500	NONE NONE NONE 2000 3200	900 600 300 300 300	1300 750 350 325 300	5.0 2.9 1.3 1.3 1.3	1350 800 375 325 300	5.0 2.9 1.3 1.3 1.3	1950 1350 650 575 525	9.3 6.1 2.7 2.8 2.7	1050 1350 660 550 525	8.6 5.4 2.4 2.4 2.2	2200 1700 850 750 700	10.0 9.5 4.7 4.0 3.8	
NOTES:	RED FIGURES ARE PRELIMINARY; SUBJECT TO REVISION AFTER FLIGHT CHECK * MILITARY POWER AVAILABLE FOR 15 MINUTES.																									



P-38  
"LIGHTNING"

MANUFACTURED BY LOCKHEED (Burbank) "10"

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TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART																
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MODEL & BLOCK NO.	NUMBER	ENGINE & PROP.		SIZE		WT.	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	B-BASIC C-COMBAT R-RECD LIM W-WAR MAX			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		
P-38 J-LO -5 & -10	2	ALLISON V-1710-89 & -91 TURBO CURTISS 11'6" DIA. - 3BL. PP. - ELECTRIC	T 1125/8 L M 1125/26500 C 1100/32500	S 52' 0" L 37' 10" H 12' 10" T 16' 6" W 328 SQ. FT.	B 13550 C 16300 R 21000 W -	1	MAIN - WING RES. - WING TROP. - EXT.	2 x 90 2 x 60 2 x 75 or 2 x 150 or 2 x 300 1024 GALS.	1-20MM 4- .50 (MAX.)	150 500	NOSE - AN M2 "C" NOSE - FIRED	NONE	2-1500 2-1000 2-500 2-325 2-250 2-100	3200	SCR-271A* SCR-515** SCR-522 SCR-695	TECHNICAL ORDER 01-75 PP-1. (24 SEPT. 1943) * PROVISIONS ONLY ** SPARE PROVIDED
P-38 J-LO -5 TO -15 INCL. [L.E. TANKS]	2	AS ABOVE	T 1125/8 L M 1600/26500 C 1100/32500	AS ABOVE	B 13700 C 17200 R 27000 W -	1	MAIN - WING RES. - WING L.E. - WING TROP. - EXT. (SEE A)	2 x 90 2 x 60 2 x 75 or 2 x 150 or 2 x 300 1024 GALS.	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	REFERENCE AS ABOVE A- THE 2x52 GAL. LEADING EDGE TANKS ARE INSTALLED AT FACTORY, MOD. CENTER OR PURCHASED TO SERVICE IN KITS. NO WAR EMERGENCY RATING.
			T M C	S L H T W	B C R W											
			T M C	S L H T W	B C R W											
			T M C	S L H T W	B C R W											

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										REMARKS ON PERFORMANCE			
	GROSS WEIGHT LB.	TO CLEAR 50' T.O. DIST. FT.		LANDING SPEED MPH	GROUND-RUN T.O. DIST. FT.		STD. ALT. FT.	MIL. POWER HIGH SPEED MPH		MAX. CONTIN. POWER HIGH SPEED MPH			TAKE OFF WEIGHT LB.	BOMBS CARGO LB.	TOTAL FUEL U.S. GAL.	MAX. CONTINUOUS POWER AT 10000 FT.		MAX. CRUISE POWER AT 10000 FT.		LONG RANGE AT 10000 FT.					
		FT.	FT.		FT.	FT.		FT.	FT.	FT.	FT.	FT.				FT.	FT.	FT.	FT.	FT.	FT.		FT.	FT.	FT.
P-38 J-LO -5 & -10	13500	-	2750	86	-	1150	30000	101	1150	398	10.0	20300	NONE	900	1000	3.4	1000	3.8	1700	4.7	1750	4.9	2100	12.0	P-38J SERIES HAVE INCREASED DRAG DUE TO EXTERNAL CORE TYPE COOLERS. PERFORMANCE VALUES WITHOUT EXTERNAL RACKS.
	15500	3000	3050	93	1350	1625	25000	106	1250	385	7.8	18900	NONE	630	750	2.6	775	2.6	1250	4.5	1300	4.6	1675	9.2	
	16300	2100	3000	96	1150	1700	20000	392	1050	366	5.9	16300	NONE	300	325	1.1	350	1.1	600	2.3	600	2.2	800	4.5	
[MILITARY POWER]	18300	2700	-	-	1150	-	15000	374	1050	355	4.3	18300	2000	300	300	1.1	300	1.1	525	2.2	525	2.0	700	3.7	
	20300	3600	-	-	2250	-	10000	365	1000	340	2.8	19500	3200	300	290	1.1	275	1.1	475	2.0	500	1.9	650	5.8	
P-38 J-LO -5 & -10		A B	A B O V E				16300	106	1150	398	10.0													AS ABOVE	
[WAR EMER. POWER]							15000	390	1050	360	AS ABOVE														
P-38 J-LO -5 TO -15 INCL. [L.E. TANKS]	13500	-	2750	86	-	1150	30000	107	1250	395	10.5	21300	NONE	1024	1075	4.3	1100	4.5	1850	7.4	1915	7.7	2300	13.5	AS ABOVE
	15500	1900	3050	93	1250	1800	25000	106	1250	360	8.5	19900	NONE	754	835	3.1	900	3.1	1100	5.3	1500	5.4	1950	12.1	
	17200	2250	3350	97	1250	2000	20000	387	1050	361	6.4	17200	NONE	424	450	1.6	475	1.6	825	3.2	860	3.2	1200	6.8	
[MILITARY POWER]	19200	3100	3650	103	1700	2000	15000	374	1050	350	4.7	19200	2000	424	425	1.6	425	1.6	725	3.1	750	2.8	1000	5.4	
	20400	4000	-	-	2250	2100	10000	362	1000	337	3.1	20400	3200	424	400	1.6	410	1.6	685	2.9	725	2.7	900	5.3	
	21300	4000	-	-	3000	-	5000	347	1000	314	1.9														
[WAR EMER. POWER]							17200	101	1250	360	AS ABOVE														
							15000	346	1050	3350															
							10000	371	1000	3500															
							5000	350	1000	3400															

NOTES:

RED FIGURES ARE PRELIMINARY. SUBJECT TO REVISION AFTER FLIGHT CHECK  
\* MILITARY POWER AVAILABLE FOR 15 MINUTES



P-38  
"LIGHTNING"

MANUFACTURED BY LOCKHEED (Burbank) "LO"


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TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART																
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PAGE 11 AS OF: DATE 20 FEB 1943																
MODEL & BLOCK NO.	ENGINE & PROP.		SIZE		WT.		FUEL		ARMAMENT			BOMBS-CARGO-PASS		RADIO	REMARKS & REFERENCE	
	NUMBER	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 MAL.	COMBAT CREW	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-BE	1	ALLISON V-1710-35 SINGLE SPEED CURTISS 10'5" DIA. - 3BL. CONST. SPD. HYDR.	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 6300 C 7650 R 9200	1	WING TOTALS 12-120 PROP.-BELLY 1x75 or 1x156 or 1x175 295 TOT.	4-.30 2-.50 1-37MM	*1000 200 30	WING - FIXED NOSE - FIXED PROP. - TYPE ML	NONE	1-500 1-300 1-250 1-100	500	SCR-263	TECHNICAL ORDER 01-110PB-1. (30 JUNE 1943)	
P-39D-BE -1	1	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	1	AS ABOVE	4-.30 2-.50 1-37MM	*1000 200 60	WING - FIXED NOSE - FIXED PROP. - TYPE ML	AS	AS ABOVE	AS ABOVE	SCR-271R OF SCR-522A & SCR-535A	TECHNICAL ORDER 01-110PB-1. (30 JUNE 1943)	
P-39D-BE -2	1	ALLISON V-1710-63 SINGLE SPEED CURTISS 10'5" DIA. - 3BL. CONST. SPD. HYDR.	T 1325/S L M 1150/12000 C 1000/10800	AS ABOVE	AS ABOVE	1	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	
P-39F-BE	1	ALLISON V-1710-35 SINGLE SPEED AGRO PRODUCTS 10'5" DIA. - 3BL. CONST. SPD. HYDR.	T 1150/S L M 1150/12000 C 1000/10800	AS ABOVE	AS ABOVE	1	AS ABOVE	4-.30 2-.50 1-37MM	*1000 200 30	WING - FIXED NOSE - FIXED PROP. - TYPE ML	AS	AS ABOVE	AS ABOVE	SCR-263	TECHNICAL ORDER 01-110PB-1. (30 JUNE 1943)	
P-39K-BE -1	1	ALLISON V-1710-63 SINGLE SPEED AGRO PRODUCTS 10'5" DIA. - 3BL. CONST. SPD. HYDR.	T 1325/S L M 1150/12000 C 1000/10800	AS ABOVE	AS ABOVE	1	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS	AS ABOVE	AS ABOVE	SCR-271R OF SCR-522A & SCR-535A	TECHNICAL ORDER 01-110PB-1. (30 JUNE 1943)	

MODEL & BLOCK NO.	TAKE OFF & LANDING				HIGH SPEED & CLIMB						RANGE & ENDURANCE										REMARKS ON PERFORMANCE				
	HARD SURFACE - NO WIND				AT NORMAL COMBAT WEIGHT						STATUTE AIR MILES - NO WIND - NO ALLOWANCE FOR RESERVE														
	GROSS WEIGHT LB.	TO CLEAR 50' DIST. FT.	LAND. DIST. FT.	LANDING SPEED MPH	T.O. DIST. FT.	LAND. DIST. FT.	WEIGHT LB.	STD. ALT. FT.	HIGH SPEED MPH	RATE OF CLIMB FT/MIN.	HIGH SPEED MPH	RATE OF CLIMB FT/MIN.	TIME TO CLIMB MIN.	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.			
P-39D-BE	5700 7600 7800 8150 8850	- 2500 2700 3000 4200	1850 2050 2100 2200 -	82 86 88 91 -	- 1800 1350 1100 -	1100 1300 1350 1100 -	7650	25000 20000 15000 10000 5000	324 312 360 395 335	750 1350 2000 2150 2550	310 332 343 346 383	11.0 9.1 6.1 3.9 1.9	8650 8600 8150 7650 8150	NONE NONE NONE NONE 500	295 276 195 120 120	950 925 1300 375 325	2.2 2.0 1.6 0.9 0.9	- - - 150 -	- - - 1.7 -	350 350 350 250 -	1.5 1.5 1.5 1.5 -	1100 1050 800 600 450	6.2 5.9 4.7 2.9 2.6	ALL PERFORMANCE JUSTIFIED	
P-39D-BE -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	
P-39D-BE -2	6700 7600 7800 8150 8850	- 2500 2700 3000 4200	1850 2050 2100 2200 -	82 86 88 91 -	- 1800 1350 1100 -	1100 1300 1350 1100 -	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-BE	SIMILAR TO P-39D	SIMILAR TO P-39D	SIMILAR TO P-39D	SIMILAR TO P-39D	SIMILAR TO P-39D	SIMILAR TO P-39D	SIMILAR TO P-39D	SIMILAR TO P-39D	SIMILAR TO P-39D	SIMILAR TO P-39D	SIMILAR TO P-39D	SIMILAR TO P-39D	SIMILAR TO P-39D	SIMILAR TO P-39D	SIMILAR TO P-39D	SIMILAR TO P-39D	SIMILAR TO P-39D	SIMILAR TO P-39D	SIMILAR TO P-39D	SIMILAR TO P-39D	SIMILAR TO P-39D	SIMILAR TO P-39D	SIMILAR TO P-39D	SIMILAR TO P-39D	SIMILAR TO P-39D
P-39K-BE -1	SIMILAR TO P-39D-2	SIMILAR TO P-39D-2	SIMILAR TO P-39D-2	SIMILAR TO P-39D-2	SIMILAR TO P-39D-2	SIMILAR TO P-39D-2	SIMILAR TO P-39D-2	SIMILAR TO P-39D-2	SIMILAR TO P-39D-2	SIMILAR TO P-39D-2	SIMILAR TO P-39D-2	SIMILAR TO P-39D-2	SIMILAR TO P-39D-2	SIMILAR TO P-39D-2	SIMILAR TO P-39D-2	SIMILAR TO P-39D-2	SIMILAR TO P-39D-2	SIMILAR TO P-39D-2	SIMILAR TO P-39D-2	SIMILAR TO P-39D-2	SIMILAR TO P-39D-2	SIMILAR TO P-39D-2	SIMILAR TO P-39D-2	SIMILAR TO P-39D-2	SIMILAR TO P-39D-2

NOTES:  
 1. RANIER P-39 MODELS MODIFIED FOR AIR/GROUND SUPPORT BY INSTALLATION OF CAMERAS, BELLY ARMOR, ETC.  
 2. \* 1000 RDS./GUN MAX. FOR GROUND STRAPPING; 300 RDS./GUN NORMAL.  
 3. RED FIGURES ARE PRELIMINARY; SUBJECT TO REVISION AFTER FLIGHT CHECK  
 4. \* MILITARY POWER AVAILABLE FOR 15 MINUTES



**P-39**  
"AIRACOBRA"

MANUFACTURED BY BELL (Buffalo) "BE"

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**TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART**

PAGE 11a  
AS OF: 29 FEB 1945  
DATE: 29 FEB 1945

MODEL & BLOCK NO.	ENGINE & PROP.		SIZE		WT.	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	a-BASIC c-COMBAT r-RECD LIM. w-WAR MAX.			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.		
P-39L-BE -1	ALLISON W-1710-63 SINGLE SPEED CURTISS 10'5" DIA. - 3BL. CONST. SPD. 11200	1325/8 L 1150/12000 1000/10600	S 34' 0" L 30' 2" H 11' 10" T 11' 4" W 213 SQ. FT.	B 6500 C 7900 R 9200	1	WING TOTALS 12-120 DROPP. - BELLY 1 x 75 or 1 x 156 or 1 x 175 265 TOT.	4-.30 2-.50 1-37MM	*1000 200 30	WING - FIXED NOSE - FIXED PROP. - TYPE M1	NONE	1-500 1-525 1-250 1-100	500	SCR-271N or SCR-522A & SCR-535A	TECHNICAL ORDER 01-110PM-1. (30 JUNE 1943)		
P-39M-BE -1	ALLISON W-1710-63 SINGLE SPEED CURTISS 10'5" DIA. - 3BL. CONST. SPD. 11200	1200/8 L 1125/15500 1000/11000	AS ABOVE	AS ABOVE	1	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	TECHNICAL ORDER 01-110PM-1. (30 JULY 1943)		
P-39N-BE -0 TO -5 INCL.	ALLISON W-1710-65 (A) SINGLE SPEED AERO PRODUCTS 11'7" DIA. - 3BL. CONST. SPD. 11200	AS ABOVE	AS ABOVE	AS ABOVE	1	WING TOTALS 8-87 DROPP. - BELLY 1 x 75 or 1 x 156 or 1 x 175 262 TOT. SEE REMARKS **	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	SCR-271N or SCR-522A & SCR-535A & SCR-695	TECHNICAL ORDER 01-110PM-1. (10 AUG. 1943) ** SCR-695 REPLACES SCR-535A ON P-39N-5 ONLY. ** 1st. 166 P-39M-0 BUILT-IN FUEL 120 GAL. KITS AVAILABLE IN SERVICE TO INCREASE FUEL OF ALL "N" TO 120 GAL.		
P-39Q-BE -1 TO -20 INCL.	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	1	AS ABOVE EXCEPT: BUILT-IN FUEL ** P-39Q-1 ..... 87 GAL. P-39Q-5 ..... 110 GAL. P-39Q-10 to -20 120 GAL.	2-.50 2-.50 1-37MM	300 200 30	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	SCR-271N or SCR-522A & SCR-695	TECHNICAL ORDER 01-110PM-1. (20 AUG. 1943) ** KITS AVAILABLE IN SERVICE TO INCREASE BUILT-IN FUEL OF P-39Q-1 & -5 TO 120 GAL.		

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										REMARKS ON PERFORMANCE							
	GROSS WEIGHT LB.	TO CLEAR 50 FT.		LANDING SPEED MPH	GROUND-RUN		STD. ALT. FT.	MIL. POWER MPH	MAX. CONTIN. POWER RATE OF CLIMB FT/MIN	HIGH SPEED RATE OF CLIMB FT/MIN	TIME TO CLIMB MIN	TAKE OFF WEIGHT LB.	BOMBS-CARGO-PASS LB.	TOTAL FUEL U.S. GAL.	MAX. CONTINUOUS POWER AT 10000 FT.		MAX. CRUISE POWER AT 25000 FT.		LONG RANGE AT 10000 FT.										
		T.O. DIST. FT.	LAND. DIST. FT.		T.O. DIST. FT.	LAND. DIST. FT.									RANGE MILES	ENDUR. HOURS	RANGE MILES	ENDUR. HOURS	RANGE MILES	ENDUR. HOURS	RANGE MILES		ENDUR. HOURS	RANGE MILES	ENDUR. HOURS				
P-39L-BE -1	7000 7400 7900 8400 9100	- 2500 3100 3750 5000	1950 2000 2100 - -	84 86 89 - -	1150 1200 1300 -	7900	25000 20000 15000 10000 5000	325 317 360 354 335	650 1250 1900 2350 2800	309 330 342 344 322	11.9 9.7 6.6 4.2 2.1	9100 8400 7900 8400	NONE NONE NONE NONE 500	295 195 120 120 120	- 1.6 0.9 0.9 0.9	950 950 125 125 275	2.5 2.5 1.5 1.2 1.2	525 525 350 350 350	2.1 1.5 1.5 1.5 1.5	- - - - -	1075 750 550 550 600	6.0 4.2 2.5 2.5 2.3	ALL PERFORMANCE ESTIMATED.						
P-39M-BE -1	7000 7400 7900 8400 9100	- 1100 1750 1400 5500	1950 2000 2100 -	84 86 89 -	1100 1300 1150 -	7900	25000 20000 15000 10000 5000	357 365 370 350 330	650 1200 1775 2400 2250 2050	309 352 357 337 320	12.8 9.5 7.1 4.9 2.5	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-39N-BE -0 TO -5 INCL.	6800 7500 8100 8700 8800	- 2550 3050 3600 3700	1850 2050 2150 -	83 88 91 -	1100 1300 1100 -	7600	25000 20000 15000 10000 5000	368 375 376 357 330	650 1225 1625 2600 2600	309 352 355 345 320	11.9 8.5 6.1 4.9 2.0	8750 8600 8050 7550 8050	NONE NONE NONE NONE 500	262 213 162 87 87	500 150 350 175 150	2.0 1.8 1.4 0.6 0.6	950 775 525 500 225	3.5 3.2 2.2 1.1 1.0	525 525 300 300 300	1.1 1.1 1.1 1.1 1.1	- - - - -	975 800 585 390 375	5.4 5.0 3.3 1.7 1.5	SEE NOTE (B) BELOW.					
P-39Q-BE -5	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	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE
P-39Q-BE -10 TO -20 IN.	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	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE

NOTES:

RANDOM P-39 MODELS MODIFIED FOR AIR/GROUND SUPPORT BY INSTALLATION OF CAMERAS, BELLY ARMOR, ETC.

\* 1000 RB./GUN MAX. FOR GROUND STRAPPING; 300 RB./GUN NORMAL.

ATTENTION:

KITS AVAILABLE IN SERVICE TO INCREASE BUILT-IN FUEL CAPACITY OF ALL P-39Q & P-39M MODELS TO 120 GAL. PERFORMANCE WILL BE SAME AS SHOWN FOR P-39Q-10 TO -20 MODELS.

RED FIGURES ARE PRELIMINARY; SUBJECT TO REVISION AFTER FLIGHT CHECK

\* MILITARY POWER AVAILABLE FOR 15 MINUTES

(A) ARRANGEMENTS ARE BEING MADE TO INCORPORATE AUTOMATIC SPEED-BOOST CONTROL ON P-39M-0 TO -5 & P-39Q-1 & -5 IN THE NEAR FUTURE; P-39Q-10, -15 & -20 HAVE AN AUTOMATIC SPEED-BOOST CONTROL.

(B) RANGES SHOWN WERE ESTIMATED FOR CONVENTIONAL TYPE AIRPLANES; AIRPLANES EQUIPPED WITH AUTOMATIC SPEED-BOOST CONTROL PROBABLY WILL NOT ATTAIN MAXIMUM RANGES AS SHOWN.



P-39

"AIRACOBRA"

MANUFACTURED BY BELL (Buffalo) "BE"

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PAGE 12a  
AS OF:  
DATE 20 FEB 1944

**TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART**

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MODEL & BLOCK NO.	ENGINE & PROP.		SIZE		WT.	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	B-BASIC C-COMBAT R-RECD LIM W-WAR MAX			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.		
P-40N-CU -1	ALLISON V-1710-81 SINGLE SPEED CURTISS 11'0" DIA. - 3 BL. CONST. SPD. ELECT.	1200/8 L 1125/17300 1000/16400	37'4" 33'4" 12'4" 8'2" 236 SQ. FT.	6400 7725 11000	1	REAR - WING FUSELAGE 1 x 54 1 x 68 1 x 52, 75, 150 or 170 236 TOT.	1 x 54 1 x 68 1 x 70	4-.50	201 (average)	WING - FIXED	NONE	1-500 & 2-100 or 6-20 1-325 1-250 1-100	500	SCR-274 or SCR-522A & SCR-695	TECHNICAL ORDER 01-25CN-1. (REV. 10 OCT. '43) * PROVISIONS FOR RACKS ONLY.	
P-40N-CU -5 TO -15 INCL.	AS ABOVE	AS ABOVE	AS ABOVE	6700 8400 11500	1	REAR - WING FRONT - WING FUSELAGE 1 x 54 1 x 37 1 x 70	1 x 54 1 x 37 1 x 70	6-.50	281 (average)	AS ABOVE	NONE	1-500 & 2-100 or 6-20 1-325 1-250 1-100	1500	SCR-274 or SCR-522A & SCR-695	REFERENCE AS ABOVE * PROVISIONS FOR 2-225 GAL. FERRYING TANKS or 2-500 LB. or 2-100 LB. EXTERNAL WING BOMBS IN ADDITION TO 1-500 LB. BOMB IN PLACE OF BELLY TANK. SPACE ONLY FOR 6-20 LB. BOMBS	
P-40N-CU -20 & -25	ALLISON V-1710-99 = SINGLE SPEED CURTISS 11'0" DIA. - 3 BL. CONST. SPD. ELECT.	AS ABOVE	AS ABOVE	AS ABOVE	1	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	SCR-274 or SCR-522A & SCR-695	REFERENCE AND NOTE AS ABOVE. * FIRST 1272 AIRPLANES OF P-40N-20 SERIES DO NOT HAVE MODIFIER ON AUTOMATIC SPEED-BOOST CONTROL. REMAINDER -20 & ALL -25 INCORPORATE A MANIFOLD PRESS. MODIFIER.	

COLUMN 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

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											REMARKS ON PERFORMANCE					
	GROSS WEIGHT LB.	TO CLEAR 50'		LANDING SPEED M.P.H.	GROUND-RUN		WEIGHT LB.	STD. ALT. FT.	MIL. POWER		MAX. CONTIN. POWER		TAKE OFF WEIGHT LB.	BOMBS CARGO LB.	TOTAL FUEL U.S. GAL.	MAX. CONTINUOUS POWER				MAX. CRUISE POWER				LONG RANGE			
		T.O. DIST. FT.	LAND. DIST. FT.		T.O. DIST. FT.	LAND. DIST. FT.			HIGH SPEED M.P.H.	RATE OF CLIMB FT./MIN.	HIGH SPEED M.P.H.	RATE OF CLIMB FT./MIN.				TIME TO CLIMB MIN.	AT 10000 FT.	AT 25000 FT.	AT 10000 FT.	AT 25000 FT.	AT 10000 FT.		AT 25000 FT.	RANGE MILES	ENDUR. HOURS	RANGE MILES	ENDUR. HOURS
P-40N-CU -1	7000 7725 8250 8425 8850	- 2150 2950 3100 3500	1650 1750 1750 1850 -	92 105 105 1150 1950	- 1350 1700 1800 1150	1000 1100 1100 1150	7725	25000 20000 15000 10000 5000	332 346 348 331 313	1225 1850 2400 2525 2425	313 330 333 315 297	12.4 9.1 6.7 4.1 2.1	8850 8250 7725 8225	NONE NONE NONE 500	292 197 122 122	600 380 230 210	2.2 1.5 0.9 0.9	- 500 290 260	- 2.1 1.2 1.2	1050 760 430 420	4.9 3.6 1.9 2.0	- - - -	- - - -	1250 850 520 480	7.4 3.8 2.8 2.5		
P-40N-CU -5 TO -15 INCL.	7000 8400 8900 9100 9500 11100	- 2700 3550 3800 4650 5700	1650 1850 1850 1900 -	92 100 109 - -	- 1650 2050 2200 2250 -	1000 1200 1200 1250	8400	25000 20000 15000 10000 5000	325 340 343 325 308	900 1550 2130 2230 2120	306 325 328 310 291	13.0 8.8 6.0 4.7 2.4	11100 9500 8900 8400 8900	NONE NONE NONE NONE 500	611 331 236 161 161	1250 675 470 320 300	4.9 2.6 1.8 1.2 1.2	- - 600 400 370	- - 2.5 1.6 1.6	2250 1250 930 630 590	10.9 6.0 4.3 2.6 2.8	- - - -	- - - -	2800 1550 1080 750 -	15.7 8.4 5.7 3.9 -	NO RANGE DATA WITH 1500 LB. BOMBS. PERFORMANCE DATA WITH EXTERNAL WING AND BELLY RACKS.	
P-40N-CU -20 & -25		AS ABOVE	AS ABOVE							AS ABOVE																	NO PERFORMANCE AVAILABLE

18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45

NOTES:

RED FIGURES ARE PRELIMINARY; SUBJECT TO REVISION AFTER FLIGHT CHECK  
\* MILITARY POWER AVAILABLE FOR 15 MINUTES



**P-40**  
"WARHAWK"

MANUFACTURED BY CURTISS (Buffalo) "CU"

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PAGE 13  
AS OF  
DATE 21 FEB 1944

### TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART

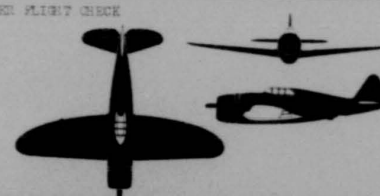
MODEL & BLOCK NO.	ENGINE & PROP.		SIZE		WT.	COMBAT CREW	FUEL		ARMAMENT			BOMBS-CARGO-PASS.		RADIO	REMARKS & REFERENCE	
	NUMBER	ENGINE MFG. MODEL SUPERCHARGER PROP. MFG. TYPE	B.H.P./ALT. T-TAKE-OFF M-MILITARY C-CONTINUOUS	S-SPAN L-LENGTH H-HEIGHT T-TREAD W-WING AREA	B-BASIC C-COMBAT R-RECD.LIM W-WAR MAX.		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-47C-RE -170-5 INCL P-47D-RE & RA -170-20 INCL P-47G-CU -170-16 INCL	1	FRATT-WHITNEY R-2800-21, -59, -63 TURBO CURTISS 12" DIA. - 4 BL. CONST. SPD. HYDRO.	T 2000/ S L M 2000/27000 W 2300/27000 C 1625/29000	S 40'9" L 36'1" H 14'2" T 15'6" W 300 SQ. FT.	B 10700 C 13500 R 15000	1	MAIN - FUS. 1 x 205 AUX. - FUS. 1 x 100 DROPP. - BELLY 1 x 75 EXT. - WINGS & BELLY 2 x 150 or 1 x 75 (SEE ***) 680 TOT.	6) .50 or 8)	267 HOR. 425 MAX.	WING - FIXED	NONE	1-500 or 2-500 or 3-500	1500	SCR-271M SCR-522A SCR-535A SCR-695	TECHNICAL ORDER 01-65BC-1. (REV. 20 NOV. '43) R-2800-21 ENGINE WILL HAVE WAR EMERGENCY RATING WHEN WATER INJECTION EQUIPMENT IS INSTALLED & REDESIGNATED R-2800-63. ** ALL MODELS AFTER P-47D-4 HAVE B-7 SHACKLE FOR BELLY TANK OF BOMB; MODELS AFTER P-47D-15 HAVE WING RACES FOR TANKS OR BOMBS. *** ONLY EARLY MODELS CARRY 200 GAL. DROPPABLE BELLY TANK. MAX. FUEL OF 680 GAL. COMPRISED OF BUILT-IN FUEL PLUS 2-150 EXTERNAL WING TANKS & 1-75 GAL. BELLY TANK, ONLY. NO WAR EMERGENCY RATING.	
P-47D-RE -22	1	FRATT-WHITNEY R-2800-59 TURBO HAM. STD. 13" DIA. - 4 BL. CONST. SPD. HYDRO.	T 2000/ S L M 2000/27000 W 2300/27000 C 1625/29000	AS ABOVE	AS ABOVE	1	MAIN - FUS. 1 x 205 AUX. - FUS. 1 x 100 DROPP. - BELLY 1 x 75 or 1 x 150 EXT. - WINGS & DROPP. BELLY 2 x 150 or 1 x 75 (SEE ***) 680 TOT.	A S	A B O V E	A S	A B O V E	AS ABOVE	AS ABOVE	AS ABOVE		

COLUMN --- 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

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										REMARKS ON PERFORMANCE	
	GROSS WEIGHT LB.	TO CLEAR 50 FT.		LANDING SPEED MPH	GROUND-RUN		WEIGHT LB.	STD. ALT. FT.	MIL. POWER		MAX. CONTIN. POWER		TAKE OFF WEIGHT LB.	BOMBS CARGO LB.	TOTAL FUEL U.S. GAL.	MAX. CONTINUOUS POWER		MAX. CRUISE POWER		LONG RANGE				
		T.O. DIST. FT.	LAND. DIST. FT.		T.O. DIST. FT.	LAND. DIST. FT.			HIGH SPEED MPH	RATE OF CLIMB FT./MIN.	HIGH SPEED MPH	RATE OF CLIMB FT./MIN.				TIME TO CLIMB MIN.	RANGE MILES	ENDUR. HOURS	RANGE MILES	ENDUR. HOURS	RANGE MILES	ENDUR. HOURS		RANGE MILES
P-47C-RE -170-5 INCL P-47D-RE & RA -170-20 INCL P-47G-CU -170-16 INCL [MILITARY POWER]	11000 12500 13500 14000 15000	- 3100 3300 3400 3800	2200 2500 2600 2800 -	92 100 101 106 -	1800 2000 1700 1800 -	13500	30000 25000 20000 15000 10000 5000	420 416 400 384 368 352	1750 1750 2050 2200 2300 2350	344 375 365 350 335 320	800 15.0 11.0 7.2 4.3 2.2	20.0 15600 14900 14300 14100 13500	NONE NONE NONE NONE NONE NONE	680 605 505 420 380 305	900 800 685 585 475 385	3.0 2.6 2.8 1.8 1.6 1.3	950 850 650 550 475 400	3.0 2.6 2.2 1.8 1.6 1.3	- - - - - -	- - - - - -	1725 1585 1400 1035 905 835	8.3 7.5 5.4 4.9 4.4 3.8	NO RANGE DATA WITH BOMBS AVAILABLE. PERFORMANCE VALUES WITHOUT EXTERNAL RACES.	
P-47C-RE -170-5 INCL P-47D-RE & RA -170-20 INCL P-47G-CU -170-16 INCL [WAR EMERG. POW.]		A S	A B O V E			13500	30000 25000 20000 15000 10000 5000	433 421 406 390 372 353	1375 1825 2140 2400 2630 2750	AS ABOVE	AS ABOVE													A S A B O V E
P-47D-RE -22 [MILITARY POWER]		A S	A B O V E			13500	30000 25000 20000 15000 10000 5000	420 416 400 384 368 352	1750 1750 2050 2200 2300 2350	344 375 365 350 335 320	800 15.0 11.0 7.2 4.3 2.2	20.0 15600 14900 14300 14100 13500	NONE NONE NONE NONE NONE NONE	680 605 505 420 380 305	900 800 685 585 475 385	3.0 2.6 2.8 1.8 1.6 1.3	950 850 650 550 475 400	3.0 2.6 2.2 1.8 1.6 1.3	- - - - - -	- - - - - -	1725 1585 1400 1035 905 835	8.3 7.5 5.4 4.9 4.4 3.8	A S A B O V E	
P-47D-RE -22 [WAR EMERG. POW.]		A S	A B O V E			13500	30000 25000 20000 15000 10000 5000	433 421 406 390 372 353	1375 1825 2140 2400 2630 2750	AS ABOVE	AS ABOVE													A S A B O V E

18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45

NOTES: (A) R-2800-21 (WATER INJECTION PROVISIONS; KITS AVAILABLE FOR INSTALLATION) USED ON: P-47C-1, -2 & -5; P-47D-1, -2, -3 & -4, -5, -6; P-47G-1, -5 & -10  
R-2800-59 (WATER INJECTION & NEW ELECTRICAL HARNESS) USED ON: P-47D-20; P-47D-21; P-47D-22  
R-2800-63 (WATER INJECTION) USED ON: P-47D-10, -11, -15 & -16; P-47G-15 & -16  
SEE FIGURES ARE PRELIMINARY; SUBJECT TO REVISION AFTER FLIGHT CHECK  
\* MILITARY POWER AVAILABLE FOR 15 MINUTES.



**P-47**  
"THUNDERBOLT"

MANUFACTURED BY REPUBLIC (Farmingdale) "RE"; (Evansville) "RA" & CURTISS (Buffalo) "CU"

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TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART																
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MODEL & BLOCK NO.		ENGINE & PROP.		SIZE		WT.	COMBAT CREW	FUEL		ARMAMENT			BOMBS-CARGO-PASS.		RADIO	REMARKS & REFERENCE
		ENGINE MFR.	B.H.P./ALT.	S-SPAN	B-BASIC			TANK	NO. TANKS	NO. GUNS	RDS.	LOCATION	INTERNAL	EXTERNAL	MAX.	
		MODEL	T-TAKE-OFF	L-LENGTH	C-COMBAT			TYPE	& CAPACITY	&	PER	&	NO. & SIZE	NO. & SIZE	LOAD	
		SUPERCHARGER	M-MILITARY	H-HEIGHT	R-RECD LIM.			OR	U.S. GAL.	CALIBER	GUN	TYPE	OR	OR	LB.	
		PROP. MFR.	C-CONTINUOUS	T-TREAD	W-WING AREA	W-WAR MAX.		LOCATION					STATION	CAPACITY		
		TYPE														
P-51-NA -1 & -2		ALLISON V-1710-39 SINGLE SPEED CURTISS 10'19" DIA. - 3 EL. CONST. SPD. ELECTR.	T 1150/8 L M 1150/13750 C 1000/13750	S 37' 0" L 32' 3" H 12' 2" T 11' 10" W 233 sq. ft.	B 7050 C 8800 R 10500 W -	1	1	MAIN-R. WING MAIN-L. WING RES.-L. WING	1 x 90 1 x 99 1 x 31	4-20MM	125	WING-TIPS M2	NO BOMBS CARRIED	SCR-274H & SCR-535		TECHNICAL ORDER 01-6078-1. (10 JAN. 1943)
P-51A-NA -1 TO -10 INCL.		ALLISON V-1710-51 SINGLE SPEED CURTISS 10'19" DIA. - 3 EL. CONST. SPD. ELECTR.	T 1200/8 L M 1125/18000 C 1000/17500	AS ABOVE	B 6850 C 8600 R 10500 W -	1	1	MAIN-R. WING MAIN-L. WING EXT.- WINGS	1 x 90 1 x 90 2 x 75 or 2 x 150	2) .50 2) .350	280 350	OUTRD.-WINGS INRD.-WINGS	NONE	2-500 2-325 2-250 2-100	1000	SCR-274H* SCR-535* SCR-515** SCR-522 SCR-695 * PROVISIONS ONLY ** SPACE PROVIDED
COLUMN --- 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17																

MODEL & BLOCK NO.	TAKE OFF & LANDING						HIGH SPEED & CLIMB					RANGE & ENDURANCE										REMARKS ON PERFORMANCE			
	HARD SURFACE - NO WIND						AT NORMAL COMBAT WEIGHT					STATUTE AIR MILES - NO WIND - NO ALLOWANCE FOR RESERVE													
	TO CLEAR 50'		LANDING		GROUND-RUN		WEIGHT	STD. ALT.	MIL. POWER	HIGH SPEED	RATE OF CLIMB	MAX. CONTIN. POWER	TAKE OFF WEIGHT	BOMBS	TOTAL FUEL	MAX. CONTINUOUS POWER		MAX. CRUISE POWER		LONG RANGE					
	T.O. DIST.	LAND. DIST.	LANDING SPEED	T.O. DIST.	LAND. DIST.	AT 10000 FT.										AT 25000 FT.	AT 10000 FT.	AT 25000 FT.	RANGE	ENDUR.	RANGE		ENDUR.	RANGE	ENDUR.
LB.	FT.	FT.	M.P.H.	FT.	FT.	LB.	FT.	M.P.H.	FT/MIN.	M.P.H.	FT/MIN.	MIN.	LB.	LB.	U.S. GAL.	MILES	HOURS	MILES	HOURS	MILES	HOURS	MILES	HOURS		
P-51-NA	7500	-	2600	88	-	1700	25000	337	800	215	300	16.0													
	8000	2600	2850	91	1600	1900	20000	367	1300	233	300	10.9													
	8500	3000	3100	94	1900	2100	15000	387	1800	243	300	7.6	8800	NONE	180	450	1.5	700	2.6	700	2.7	-	-	1000	4.5
	8800	3200	3250	-	2100	2250	10000	379	2000	352	300	5.0													
	9000	3400	-	-	2200	-	5000	357	2000	352	300	2.5													
P-51A-NA -1 TO -10 INCL.	8000	-	2450	100	-	1550	25000	375	1100	360	300	12.7	10600	NONE	480	1135	4.1	-	-	2000	8.3	-	-	2350	11.4
	8600	2050	2750	103	1400	1850	20000	390	1650	375	300	9.1	9600	NONE	330	725	2.7	-	-	1250	5.3	-	-	1525	7.9
	9100	2250	3000	106	1600	2100	15000	380	2300	365	300	6.6	8600	NONE	180	425	1.4	-	-	750	2.8	-	-	1000	4.8
	9600	2500	3250	-	1800	2350	10000	360	2300	345	300	4.4	9100	500	180	415	1.4	-	-	725	2.8	-	-	950	4.7
	10500	2900	-	-	2100	-	5000	340	2300	325	300	2.2	9600	1000	180	410	1.4	-	-	710	2.8	-	-	910	4.6

NOTES:

RED FIGURES ARE PRELIMINARY; SUBJECT TO REVISION AFTER FLIGHT CHECK  
 \* MILITARY POWER AVAILABLE FOR 15 MINUTES



P-51  
"MUSTANG"

MANUFACTURED BY NORTH AMERICAN (Inglewood) "NA"

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PAGE 11a  
AS OF:  
DATE 21 FEB 1944

TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART																	
MODEL & BLOCK NO.	ENGINE & PROP.		SIZE		WT.		COMBAT CREW	FUEL		ARMAMENT			BOMBS - CARGO - PASS.		RADIO	REMARKS & REFERENCE	
	NUMBER	ENGINE MFG. MODEL SUPERCHARGER PROP. MFG. TYPE	B.H.P./ALT.		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	RDS. PER GUN	LOCATION & TYPE	INTERNAL		MAX. LOAD LB.		TYPE
			T-TAKE-OFF M-MILITARY C-CONTINUOUS	T-TAKE-OFF M-MILITARY C-CONTINUOUS									NO. & SIZE OR STATION	NO. & SIZE OR CAPACITY			
P-51B-NA -1A-5 P-51C-NT -1	1	PACKARD V-1650-3 2SPD.-2 STAGE HAMILTON STD. 11"2" DIA. - 11.5" CONST. SPD. HYDRO.	T 1400/ S L M 1150/19800 C 1120/20500 240/34000	S 37' 0" L 32' 3" H 13' 8" T 11' 10" W 233 Sq. ft.	B 7300 C 9000 R 11000	1	MAIN-R. WING MAIN-L. WING EXT. - WINGS (SEE NOTE A)	1 x 90 1 x 90 2 x 75 2 x 75 480 TOT.	2) .50 2) 350	280 350	OUTBD. -WINGS INBD. -WINGS	NONE	2-500 2-325 2-250 2-100	1000	SCR-27LN SCR-522 or SCR-535A or SCR-695	TECHNICAL ORDER 01-60JD-1. (20 INC. 1943) (A) KITS AVAILABLE FOR 1-85 GAL. FUSELAGE TANK; WHEN IN- STALLED THESE MODELS WILL BE SAME AS ONES LISTED BELOW • WAR EMERGENCY RATINGS: 1595/17000' & 1295/28500' (RE- STRICTED TO MODELS EQUIPPED WITH KLG-RC5/3 or LONG RS5/5 SPARK PLUGS)	
P-51B-NA -7A-10 P-51C-NT -3	1	AS ABOVE	AS ABOVE	AS ABOVE	B 7390 C 9800 R 11850	1	MAIN-R. WING MAIN-L. WING FUSELAGE EXT. - WINGS	1 x 90 1 x 90 1 x 85 2 x 75 2 x 75 565 TOT.	A S	A B O V E	A S	A B O V E	A S	A B O V E	SCR-522 or SCR-27LN or SCR-27LN & MN-26C COMBINATION	TECHNICAL ORDER AS ABOVE LAST 500 P-51B-5 MODELS BECAME B-7 UPON ADDITION OF 1-85 GAL. FUSELAGE TANK. P-51C-5 ARE MODIFIED P-51C-1's	

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										REMARKS ON PERFORMANCE			
	TO CLEAR 50'		LANDING		GROUND-RUN		WEIGHT	STD. ALT.	MIL. POWER	HIGH SPEED	RATE OF CLIMB	HIGH SPEED	RATE OF CLIMB	TIME TO CLIMB	TAKE OFF WEIGHT	BOMBS CARGO	TOTAL FUEL	MAX. CONTINUOUS POWER			MAX. CRUISE POWER			LONG RANGE		
	T.O. DIST.	LAND. DIST.	LANDING SPEED	T.O. DIST.	LAND. DIST.	FT.												FT.	M.P.H.	FT./MIN.	M.P.H.	FT./MIN.		MIN.	LB.	LB.
P-51B-NA -1A-5 P-51C-NT -1 [MILITARY POWER]	8000	-	2150	100	-	1550	30000	1420	1750	420	11.2	11000	NONE	1480	1300	4.6	1725	5.6	1800	7.0	-	-	2250	11.1	ALL SPEED & CLIMB VALUES ARE FOR AIRPLANE WITHOUT BOMB RACKS. ESTIMATED THAT BOMB RACKS WILL INCREASE HIGH SPEED APPROX. 12 MPH. & RATE OF CLIMB LESS THAN 100'/MIN.	
P-51B-NA -1A-5 P-51C-NT -1 [WAR EMERG. POWER]	9300	2100	2800	108	1400	1800	25000	1422	2180	395	8.7	10000	NONE	330	875	3.2	1125	3.8	1200	5.0	-	-	1575	8.4		
P-51B-NA -7A-10 P-51C-NT -3 [MILITARY POWER]	10000	2400	-	-	1750	-	20000	1439	2450	405	6.5	9000	NONE	180	525	1.7	650	1.9	750	2.8	-	-	975	5.2		
P-51B-NA -7A-10 P-51C-NT -3 [WAR EMERG. POWER]	10300	2550	-	-	1850	-	15000	1419	3200	390	4.8	9500	500	180	485	1.7	600	2.0	650	2.5	-	-	900	4.7		
P-51B-NA -7A-10 P-51C-NT -3 [FUSELAGE TANK]	11000	2900	-	-	2150	-	10000	398	3180	355	3.2	10000	1000	180	475	1.7	585	2.0	635	2.6	-	-	825	4.3		
P-51B-NA -7A-10 P-51C-NT -3 [MILITARY POWER]	8100	-	2500	100	-	1600	30000	138	1530	420	12.8	11850	NONE	965	1475	5.1	1875	5.6	2200	8.7	-	-	2600	11.2		
P-51B-NA -7A-10 P-51C-NT -3 [WAR EMERG. POWER]	8600	1800	2600	103	1150	1700	25000	1420	1990	395	9.7	10850	NONE	415	975	3.5	1300	4.1	1575	6.3	-	-	1800	8.0		
P-51B-NA -7A-10 P-51C-NT -3 [FUSELAGE TANK]	9650	2250	2850	109	1550	1900	20000	1437	2220	405	7.2	9800	NONE	265	725	2.4	850	2.4	1125	4.3	-	-	1350	6.5		
P-51B-NA -7A-10 P-51C-NT -3 [WAR EMERG. POWER]	10650	2700	-	-	2000	-	15000	1417	2940	380	5.2	10250	500	265	700	2.4	800	2.4	1050	3.8	-	-	1275	6.5		
P-51B-NA -7A-10 P-51C-NT -3 [FUSELAGE TANK]	11850	3450	-	-	2650	-	10000	396	2920	355	3.5	10750	1000	265	650	2.4	750	2.4	975	3.4	-	-	1200	6.3		
P-51B-NA -7A-10 P-51C-NT -3 [WAR EMERG. POWER]	9400	-	-	-	-	-	30000	1445	1530	420	1.8	11850	NONE	965	1475	5.1	1875	5.6	2200	8.7	-	-	2600	11.2		
P-51B-NA -7A-10 P-51C-NT -3 [FUSELAGE TANK]	9600	-	-	-	-	-	25000	1420	1990	395	9.7	10850	NONE	415	975	3.5	1300	4.1	1575	6.3	-	-	1800	8.0		
P-51B-NA -7A-10 P-51C-NT -3 [WAR EMERG. POWER]	10650	2700	-	-	2000	-	20000	1437	2220	405	7.2	9800	NONE	265	725	2.4	850	2.4	1125	4.3	-	-	1350	6.5		
P-51B-NA -7A-10 P-51C-NT -3 [FUSELAGE TANK]	11850	3450	-	-	2650	-	10000	396	2920	355	3.5	10750	1000	265	650	2.4	750	2.4	975	3.4	-	-	1200	6.3		

NOTES:

RED FIGURES ARE PRELIMINARY; SUBJECT TO REVISION AFTER FLIGHT CHECK

\* MILITARY POWER AVAILABLE FOR 15 MINUTES.



P-51  
"MUSTANG"

MANUFACTURED BY NORTH AMERICAN (Inglewood) "NA" & NORTH AMERICAN (Dallas) "NT"

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PAGE 11b  
AS OF:  
DATE 24 FEB 1944

TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART																
MODEL & BLOCK NO.	ENGINE & PROP.		SIZE		WT.	COMBAT CREW	FUEL		ARMAMENT			BOMBS - EXTERNAL		RADIO	REMARKS & REFERENCE	
	ENGINE MFR. MODEL	B.H.P./ALT.	S-SPAN	B-BASIC			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-51B-NA -15 P-51C-NT -5 P-51D-NA -5	PACKARD 7-1650-7 2 SPD. - 2 STAGE HAMILTON STD. 11'2" DIA. - 4 BL. CONST. SPD. HYDRO.	T 1190/5 L M 1590/13600 C 1370/27200 1180/17000 1065/29000	S 37' 0" L 32' 3" H 13' 8" T 11' 10" W 233 SQ. FT.	B 7390 C 9600 A 11850 W -	1	MID-SP. WING MID-L. WING FUSELAGE EXT. - WINGS	1 x 90 1 x 90 1 x 85 2 x 75 2 x 150 565 TOT	2) .50 280 350	6-.50 267 (INSTALLED IN P-51D-5-NA ONLY)	CUTED. - WINGS INSD. - WINGS WINGS	NONE	2-500 2-325 2-250 2-100	1000	SCR-522 or SCR-274N or SCR-274N & NI-26C COMBINATIO	TECHNICAL ORDER 01-604D-1. (20 DEC. 1943) * WAR EMERGENCY RATINGS: 1720/11500' & 1505/24000' (RESTRICTED TO MODELS EQUIPPED WITH K10-RC5/5 or LOGGE RS5/5 SPARK PLUGS) † SOME C-5-WT MODELS FOR RECONNAISSANCE WILL NOT CARRY 85 GAL. FUSELAGE TANK; PERFORMANCE SLIGHTLY BETTER THAN FOR VALUES SHOWN ON B-15 & D-5 MODELS.	
		T M C	S L H T W	B C R W												
		T M C	S L H T W	B C R W												
		T M C	S L H T W	B C R W												
		T M C	S L H T W	B C R W												

COLUMN — 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

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										REMARKS ON PERFORMANCE		
	TO CLEAR 50'		LANDING SPEED	GROUND-RUN		STD. ALT.	MIL. POWER		MAX. CONTIN. POWER		TAKE OFF WEIGHT	BOMBS CARGO	TOTAL FUEL	MAX. CONTINUOUS POWER		MAX. CRUISE POWER		LONG RANGE							
	T.O. DIST.	LAND. DIST.		T.O. DIST.	LAND. DIST.		HIGH SPEED	RATE OF CLIMB	HIGH SPEED	RATE OF CLIMB				RANGE	ENDUR.	RANGE	ENDUR.	RANGE	ENDUR.	RANGE	ENDUR.	RANGE		ENDUR.	
P-51B-NA -15 P-51C-NT -5 P-51D-NA -5 [MILITARY POWER]	8000 9000 9800 10300 10800 11850	- 2200 2100 2550 - 3750	100 103 109 - - -	1200 1500 1550 - - -	9600	30000 25000 20000 15000 10000 5000	139 131 114 120 105 72	1150 2070 2500 2850 3100 3200	120 110 95 85 75 70	12.1 9.3 7.0 4.8 3.0 1.5	11850 10850 9800 10250 10750	NONE NONE NONE 500 1000	965 415 265 265 265	1150 1050 720 685 650	5.1 3.7 2.3 2.3 2.3	1550 1125 765 725 700	4.8 3.5 2.2 2.2 2.2	2275 1575 1110 1050 1000	9.1 6.8 4.3 4.1 4.0	- - 1065 4.0 -	2500 1950 1250 1225 1175	12.0 8.7 5.7 5.7 5.6	ALL SPEED & CLIMB VALUES ARE FOR AIRPLANE WITHOUT BOMB RACKS; ESTIMATED THAT BOMB RACKS WILL DECREASE HIGH SPEED APPROX. 12 MPH. & RATE OF CLIMB LESS THAN 100' / MIN.		
P-51B-NA -15 P-51C-NT -5 P-51D-NA -5 [WAR EMERG. POW.]	A	S	A	B	O	V	E	9600	30000 25000 20000 15000 10000 5000	1150 1150 130 120 117 70	1150 2070 2500 2850 3100 3200	AS ABOVE	AS ABOVE	A	S	A	B	O	V	E					AS ABOVE

18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45

NOTES:

RED FIGURES ARE PRELIMINARY: SUBJECT TO REVISION AFTER FLIGHT CHECK  
\* MILITARY POWER AVAILABLE FOR 15 MINUTES.



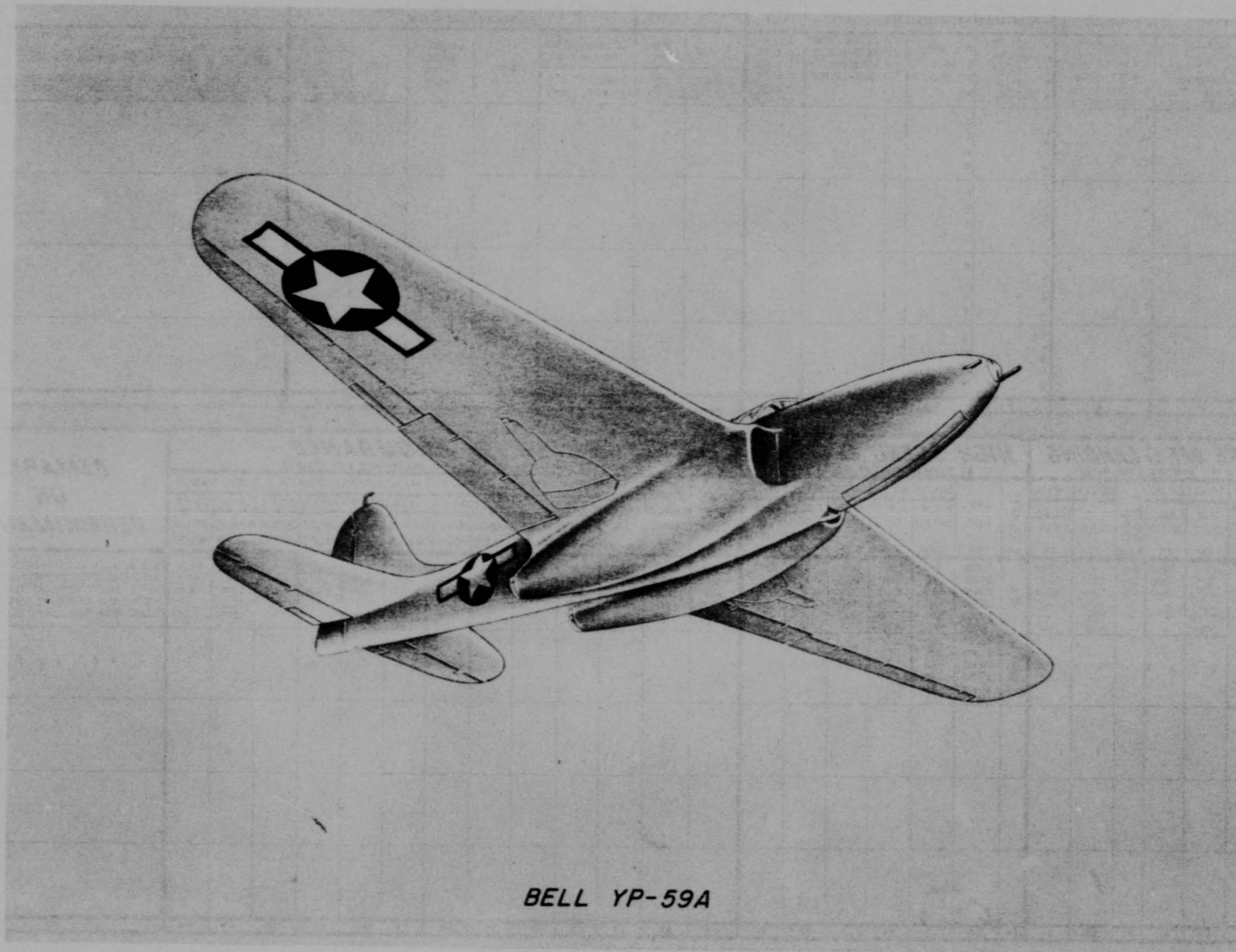
P-51  
"MUSTANG"

MANUFACTURED BY NORTH AMERICAN (Inglewood) "NA" & NORTH AMERICAN (Dallas) "N"

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TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART																	
MODEL & BLOCK NO.	ENGINE & PROP.		SIZE		WT.		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	B-BASIC C-COMBAT R-REC.D.LIM W-WAR MAX.	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			
YP-59A-BE	GENERAL ELECTRIC I-16 JET TYPE TURBO SUPERCH. ENGINE	SEE NOTE(A)	S 49' L 38'10" H 12' 1" T 18' 6" W 100 SQ.')	B 8000 C 10500 R 12700 W -	1	WINGS (INTER) 8-290 WINGS (EXTER) 2x 150 590 TOT.		2-37MM or 1-37MM & 3-.50	44 44 200	NOSE - FIXED	N O N E	SCR-271N SCR-522A SCR-535A SCR-695A		(PRELIMINARY INFORMATION FROM ENGR. DIV.) ON LAST 4 MODELS ONLY.			
COLUMN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

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										REMARKS ON PERFORMANCE			
	GROSS WEIGHT LB.	TO CLEAR 50'		LANDING SPEED MPH	GROUND-RUN		STD. ALT. FT.	MIL. POWER		MAX. CONTIN. POWER		TAKE OFF WEIGHT LB.	BOMBS CARGO PASS. LB.	TOTAL FUEL U.S. GAL.	MAX. CONTINUOUS POWER				MAX. CRUISE POWER					LONG RANGE		
		T.O. DIST. FT.	LAND. DIST. FT.		T.O. DIST. FT.	LAND. DIST. FT.		HIGH SPEED MPH	RATE OF CLIMB FT/MIN.	HIGH SPEED MPH	RATE OF CLIMB FT/MIN.				TIME TO CLIMB MIN.	AT 10000 FT.	AT 25000 FT.	AT 10000 FT.	AT 25000 FT.	RANGE MILES	ENDUR. HOURS	RANGE MILES		ENDUR. HOURS	RANGE MILES	ENDUR. HOURS
YP-59A-BE	8000 8500 9000 10500 12700	1350 1500 1675 2300 4100	1600 1675 1725 1950 -	- - - - -	800 850 925 1275 2200	900 975 1050 1200 1425	10500 8000	133 106 100 99 81	1200 1500 2000 2400 3200	328 322 377 365 350	13.2 10.2 7.4 5.1 3.2 1.5 0.0	12700 10500	BOMBS BOMBS	590 290	330 200	1.0 0.5	- -	- -	- -	- -	- -	- -	- -	- -	a 450 1.5 b 200 0.8	

NOTES: (A)  
 TENTATIVE ENGINE LIMITATIONS (FUEL - KEROSENE)  
 TAKE-OFF & MILITARY POWER (16500 R.P.M.)  
 CONTINUOUS POWER (16000 R.P.M.)

RED FIGURES ARE PRELIMINARY; SUBJECT TO REVISION AFTER FLIGHT CHECK.

GENERAL NOTE: ALL INFORMATION CONTAINED IN THIS CHART IS SUBJECT TO CONSIDERABLE REVISION AFTER FURTHER FLIGHT TESTS AND PRODUCTION CHANGES; PERFORMANCE DATA OTHER THAN HIGH SPEED AND CLIMB HAS BEEN ESTIMATED.



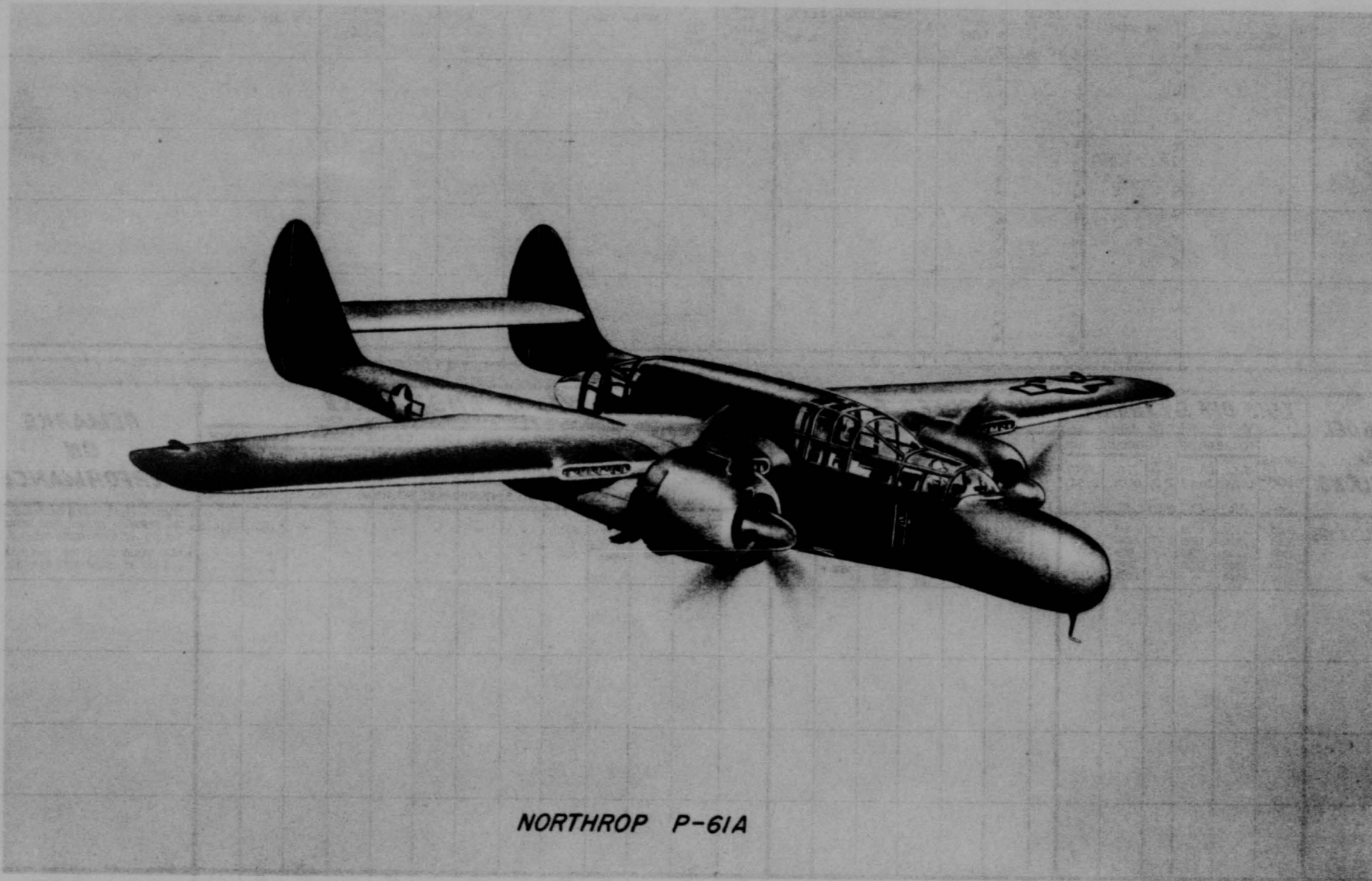
**P-59**

MANUFACTURED BY BELL (Buffalo) "BE"

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*NORTHROP P-61A*

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PAGE 16  
AS OF:  
DATE 25 FEB 1944

TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART																
MODEL & BLOCK NO.	ENGINE & PROP.		SIZE		WT.		COMBAT CREW	FUEL		ARMAMENT			BOMBS-CARGO-PASSE		RADIO	REMARKS & REFERENCE
	NUMBER	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	RDS. PER GUN	LOCATION & TYPE	INTERNAL NO. & SIZE OR STATION	EXTERNAL NO. & SIZE OR CAPACITY	MAX. LOAD LB.	
P-61A-NO	2	PRATT-WHITNEY R-2800-10 2 SPD. - 2 STG. CURTISS 12" DIA. - 4 BL. F.P., ELECTRIC	T-2000/2000 M-1800/13000 C-1650/5000 1650/10000 1650/20000	S-66' L-48'11" H-14' 2" T-17' 2" W-664 sq. ft.	B-22200 C-27200 R- W-	2 3 0	INBD.-WING OUTBD.-WING	2 x - 2 x - 646 TOT.	4-20MM 4-.50	200 500	FORE- FUSELAGE UPPER TURRET	N	O	N	N	SCR-522 SCR-695 SCR-720 SCR-730 RETR. #35 APN - 1 RC - 36 TECHNICAL ORDER 01-15FB-1. ( 15 JAN. 1944) * ON FIRST PRODUCTION MODELS ONLY. * CREW OF 3 FOR MODELS WITH TOP TURRET. * MILITARY POWER AVAILABLE FOR 15 MINUTES.
			T	S	B											
			M	L	C											
			C	H	R											
			T	S	B											
			M	L	C											
			C	H	R											
			T	S	B											
			M	L	C											
			C	H	R											

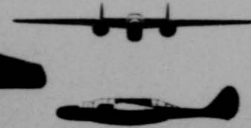
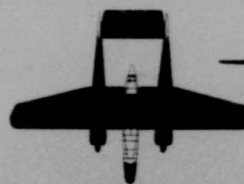
COLUMN 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17

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										REMARKS ON PERFORMANCE				
	GROSS WEIGHT LB.	TO CLEAR 50'		LANDING SPEED MPH	GROUND-RUN		WEIGHT LB.	STD. ALT. FT.	MIL. POWER		MAX. CONTIN. POWER		TAKE OFF WEIGHT LB.	BOMBS CARGO PASSES LB.	TOTAL FUEL U.S. GAL.	MAX. CONTINUOUS POWER			MAX. CRUISE POWER			LONG RANGE			
		T.O. DIST. FT.	LAND. DIST. FT.		T.O. DIST. FT.	LAND. DIST. FT.			HIGH SPEED MPH.	RATE OF CLIMB FT./MIN.	HIGH SPEED MPH.	RATE OF CLIMB FT./MIN.				TIME TO CLIMB MIN.	RANGE MILES	ENDUR. HOURS	RANGE MILES	ENDUR. HOURS		RANGE MILES	ENDUR. HOURS	RANGE MILES	ENDUR. HOURS
P-61A-NO	25000 27000 28000 29000	2250 2100 2500 2700	1950 2100 2150 -	- - - -	1350 1500 1600 1750	1350 1450 1500 -	27000	25000 20000 15000 10000 5000 5 L	354 362 350 331 316 312	900 1700 1900 2150 2250 2450	310 317 339 320 309 285	17.0 9.5 6.7 4.3 2.0 0.0	27200	NONE	646	330	1.2	365	1.4	600	2.5	520	2.1	775	4.1

18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45

NOTES:

RED FIGURES ARE PRELIMINARY; SUBJECT TO REVISION AFTER FLIGHT CHECK  
\* MILITARY POWER AVAILABLE FOR 15 MINUTES.



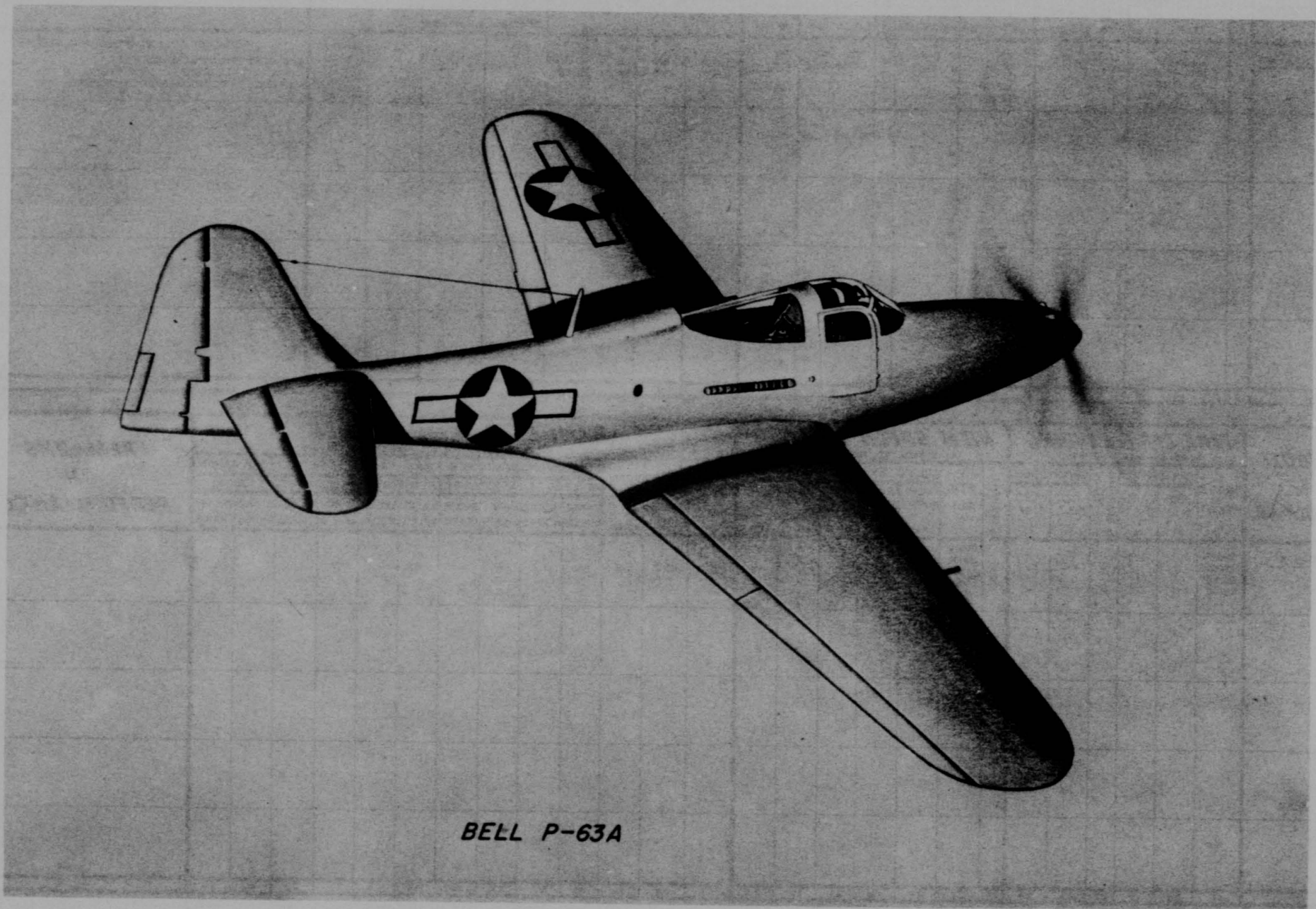
P-61  
"BLACK WIDOW"

MANUFACTURED BY NORTHERN (Sawthorne) "NO"

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BELL P-63A

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TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART																
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MODEL & BLOCK NO.	ENGINE & PROP.		SIZE		WT.		COMBAT CREW	FUEL		ARMAMENT			BOMBS-CARGO-PASS.		RADIO	REMARKS & REFERENCE
	NUMBER	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	B-BASIC C-COMBAT R-RECD.LIM W-WAR MAX	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-63A-BE -1 TO -7 INCL.	1	ALLISON V-1710-93 2 STAGE ARRO PRODUCTS 11" DIA. - LBL. CONST. SPD. HYDRO	T 1325 / S L M 1150 / 21200 we 1500 / S L C 1000 / 20000	S 38' 4" L 32' 8" H 12' 3" T 14' 7" W 21' 8" sq. ft.	B 6925 C 8350 R 8900 W -	1	MAIN - WINGS DROP. - BELLY or DROP. - WINGS (SEE P)	2 x 68 1 x 64 (3-1) or 1 x 75 or 1 x 75 2 x 75 161 TOR	1-375mm 2-50 2-50	30 250 200	PROP. - TYPE M1 WING - FIXED NOSE - FIXED	NONE	1-500 1-325 1-350 1-100	500	SCR-271A SCR-196 or SCR-522 A DISTROIA # 134 & SCR-525	TECHNICAL ORDER 01-110YP-1. (20 JULY 1943) 1-166 GAL. SELF SEALING DROPPABLE BELLY TANK AND 2x75 GAL. DROPPABLE WING TANKS ADDED TO P-63A-6. we WAR EMERGENCY RATING.

MODEL & BLOCK NO.	TAKE OFF & LANDING				HIGH SPEED & CLIMB				RANGE & ENDURANCE										REMARKS ON PERFORMANCE					
	HARD SURFACE - NO WIND				AT NORMAL COMBAT WEIGHT				STATUTE AIR MILES - NO WIND - NO ALLOWANCE FOR RESERVE															
	TO CLEAR 50'		GROUND-RUN		WEIGHT	STD. ALT.	MIL. POWER		MAX. CONTIN. POWER		TAKE OFF WEIGHT	BOMBS CARGO PASS.	TOTAL FUEL	MAX. CONTINUOUS POWER		MAX. CRUISE POWER		LONG RANGE						
T.O. DIST.	LAND. DIST.	T.O. DIST.	LAND. DIST.	HIGH SPEED			RATE OF CLIMB	HIGH SPEED	RATE OF CLIMB	TIME TO CLIMB				RANGE	ENDUR.	RANGE	ENDUR.	RANGE	ENDUR.	RANGE	ENDUR.	RANGE	ENDUR.	
LB	FT	FT	MPH	FT	FT	MPH	FT/MIN	MPH	FT/MIN	MIN	LB	LB	U.S. GAL.	MILES	HOURS	MILES	HOURS	MILES	HOURS	MILES	HOURS			
P-63A-BE -1 TO -7 INCL.	7700	1700	1800	-	1070	1110	30000	392	1150	350	#	11.0	10550	NONE	461	-	-	-	-	-	-	-	2250	13.3
	8300	2110	-	-	1320	-	25000	401	2200	365	#	8.2	9500	NONE	311	725	3.2	850	3.1	1100	4.9	-	1100	7.5
	8700	2520	-	-	1520	-	20000	368	2870	370	#	6.2	8850	NONE	211	500	2.1	600	2.1	700	3.2	-	950	4.8
	9500	2900	-	-	2000	-	15000	372	3270	355	#	4.6	8350	NONE	136	400	1.3	425	1.3	550	2.1	-	700	3.2
[MILITARY POW.]	10500	4500	-	-	3100	-	10000	395	3370	335	#	3.1	8850	500	136	350	1.3	350	1.3	450	2.0	-	600	3.0
							5000	336	3220	316	#	1.6												
P-63A-BE -1 TO -7 INCL.							30000	392	1150															
							25000	401	2200															
							20000	398	2950															
							15000	387	3550															
							10000	373	3850															
[WAR EMERG.]							5000	356	3870															

NOTES:

RED FIGURES ARE PRELIMINARY; SUBJECT TO REVISION AFTER FLIGHT CHECK.  
 # MILITARY POWER AVAILABLE FOR 15 MINUTES.

# P-63

MANUFACTURED BY BELL (Buffalo) "BE"

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FOREWORDWARNING

THESE CHARTS CONTAIN CONSERVATIVE AVERAGES FOR TACTICAL PLANNING AND ARE NOT SUITABLE FOR AERODYNAMIC ANALYSIS.

Data contained herein are not to be considered guaranteed performance nor optimum performance as established by test flight but are to be considered official "Practical" characteristics and performance to be used for planning purposes for the average pilot.

All data includes service allowances based on theater experience. Individual airplanes may vary appreciably due to age and service changes. Data printed in red are preliminary and subject to revision after flight check. Data printed in black have been derived from information obtained in flight but are not actual flight test results. For detailed planning see Technical Orders listed as references.

Range and endurance are based on the following assumptions:

- a. Allowance for warm-up, taxi, run-up, take-off, and landing. (equal to ten minutes at rated power.)
- b. Allowances for fuel consumed in climb. Distance and time to climb are included in range and endurance.
- c. Allowance for carrying bombs and droppable tanks entire flight.
- d. Allowance of 10% net ideal range for miscellaneous differences in airplanes, equipment, pilot technique, atmospheric conditions other than wind, unusable fuel, weight and balance and similar variables. (For example, range varies day and night due to fuel expansion prior to take-off.)
- e. Other than the above, no allowances for wind, assured reserve, combat, nor formation flight.

DEFINITIONS

<u>LOADING:</u>	TYPICAL LOADINGS OF GLIDER AND TOWPLANE FOR TACTICAL MISSIONS.
Note:	Weight and fuel quantities shown apply to all performance values to the right on the same line.
MAX. TOW SPEED:	MAX. PERMISSIBLE CALIBRATED INDICATED AIR SPEED FOR TOWING GLIDER AT WEIGHT SHOWN.
<u>TAKE-OFF:</u> (To clear 50' object)	DISTANCES REPRESENTATIVE OF MINIMUM AIRPORT REQUIREMENTS.
TAKE-OFF SPEED:	NORMAL FOR AVERAGE PILOT.
GROUND RUN:	DISTANCES REPRESENTATIVE OF MINIMUM RUNWAY REQUIREMENTS.
<u>CLIMB:</u> (I.A.S. for CLIMB)	MINIMUM TOWPLANE INDICATED AIR SPEED FOR GOOD CONTROL & SATISFACTORY ENGINE COOLING.
INITIAL RATE OF CLIMB:	SEA LEVEL RATE OF CLIMB AT MINIMUM TOWPLANE INDICATED AIR SPEED.
Note:	For some combinations rate of climb tends to increase up to critical altitude of tow-plane engines.
SERVICE CEILING:	ALTITUDE AT WHICH RATE OF CLIMB IS 100'/MIN.
TIME TO SERVICE CEILING:	TIME TO CLIMB IN MINUTES FROM SEA LEVEL TO SERVICE CEILING BASED ON I.A.S. FOR CLIMB.
<u>RANGE &amp; ENDURANCE:</u>	(SEE DISCUSSION UNDER FOREWORD)
RADIUS OF ACTION:	DISTANCE GLIDER CAN BE TOWED AND RELEASED WITH TOWPLANE HAVING ENOUGH FUEL TO RETURN TO BASE ALONE.
TIME OUT:	TIME FROM TAKE-OFF TO RELEASE OF GLIDER: (At recommended cruising altitude)
TIME BACK:	TIME REQUIRED FOR TOWPLANE TO RETURN TO BASE ALONE AT RECOMMENDED CRUISING SPEED AND ALTITUDE.
MAX. RANGE & ENDURANCE:	PRACTICAL MAXIMUM RANGE WHICH GLIDER CAN BE TOWED UNDER CONDITIONS SET FORTH AND CORRESPONDING TIME REQUIRED.

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**GLIDER AND  
TOWPLANE SECTION**  
1-MARCH-1944

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# TOWPLANE & GLIDER TACTICAL PLANNING PERFORMANCE CHART

PAGE 1  
AS OF:  
20 FEB. 1944

## BOMBER TOWPLANE AND CG-4A GLIDER

TOWPLANE & GLIDER COMBINATION	LOADING						TAKE OFF (WITH GLIDER ATTACHED) S.L.-HARD SURFACE-NO WIND			CLIMB (AT MINIMUM TOW SPEED)				RANGE & ENDURANCE (AT CRUISING POWER) STATUTE AIR MILES-NO WIND-NO RESERVE						REMARKS
	GLIDERS		TOWPLANE				TO CLEAR 50' OBJ. DISTANCE (FT.)	TAKE OFF SPEED (M.P.H.)	GROUND RUN DISTANCE (FT.)	I.A.S. FOR CLIMB (M.P.H.)	INITIAL RATE OF CLIMB (FT./MIN.)	SERVICE CEILING (FT.)	TIME TO SERVICE CEIL. (MIN.)	RADIUS OF ACTION (GLIDER RELEASED AT RADIUS)			RECOMM. CRUISING ALTITUDE (FT.)	MAX. RANGE (WITH GLIDER)		
	TAKE-OFF WEIGHT (LB.)	CARGO OR PASS. (LB.)	TAKE-OFF WEIGHT (LB.)	BOMBS CARGO OR PASS. (LB.)	FUEL (U.S. GAL.)	MAX. TOW SPEED (M.P.H.)								RADIUS (MI.)	TIME OUT (HRS.)	TIME BACK (HRS.)		RANGE (MI.)	ENDUR. (HRS.)	
	(LB.)	(LB.)	(LB.)	(LB.)	(U.S. GAL.)	(M.P.H.)	(FT.)	(M.P.H.)	(FT.)	(M.P.H.)	(FT./MIN.)	(FT.)	(MIN.)	(MI.)	(HRS.)	(HRS.)	(FT.)	(MI.)	(HRS.)	
B-17F & (1) CG-4A	7500	3600	59100	NONE	2780	150	6150	110	4150	135	300	12000*	37	(990)	7.2	6.8	5000	1360	10.3	* LIMITED- NO OXYGEN IN GLIDER
							(980)	6.8	6.3	10000	1370	9.6								
B-17F & (2) CG-4A	7500	3600	52500	NONE	1700	150	6000	110	4100	135	300	11000	57	510	3.8	3.5	5000	720	5.5	
	7500	3600	59100	NONE	2780	150	6950	110	4700	135	240	8000	44	860	6.6	6.2	5000	1140	8.8	
B-24D & (1) CG-4A	7500	3800	52500	NONE	2344	150	6205	115	3475	140	530	12000*	24	(870)	6.3	5.3	5000	1360	9.7	* LIMITED- NO OXYGEN IN GLIDER
	7500	3800	59000	6000	2344	150	6075	115	4125	140	325	12000*	41	(830)	5.6	4.4	10000	1280	8.6	
B-25C & (1) CG-4A	7500	3800	30000	2000	972	150	5075	120	4175	140	390	12000*	38	540	3.8	3.4	5000	700	4.9	* LIMITED- NO OXYGEN IN GLIDER

COLUMN— 1

NOTES:

- REFERENCE MATERIAL FROM TECHNICAL ORDER 01-1-143 dated 1 DEC. 1943.
- ALL PERFORMANCE SHOWN WITH GLIDER TRAINING GEAR ATTACHED.

NEW TYPES AND MODIFICATIONS: SUBJECT TO REVISION AFTER FLIGHT CHECK.

TEMPORARY TOW RELEASE MECHANISM ON B-17F CAN BE INSTALLED QUICKLY WITH NO STRUCTURAL MODIFICATIONS REQUIRED.

TOW PLANE PERFORMANCE WITH CG-4D TO BE SAME AS WITH CG-4A.

### GLIDER CHARACTERISTICS

#### WEIGHT

B—BASIC  
C—COMBAT  
W—WAR MAX.



#### SIZE

S—SPAN  
L—LENGTH  
H—HEIGHT  
T—TREAD  
W—WING AREA

### TYPICAL GLIDER CAPACITIES

B— (3700 to 4500)  
C— 7500  
W— 9000

(a) TROOP CARRIER: CREW(2) & TROOPS(13).  
(b) CARGO CARRIER: CREW(2) & TROOPS(4) & JEEP CAR(1).  
(c) CARGO CARRIER: CREW(2) & TROOPS(3) & 75MM. HOWITZER(1) & 75MM. AMMUNITION(18 RDS.)

S— 83'8"  
L— 48'4"  
H— 12'7"  
T— 9'1/2"  
W— (Tact. gear) 852 Sq. ft.

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# TOWPLANE & GLIDER TACTICAL PLANNING PERFORMANCE CHART

 PAGE 2  
 AS OF:  
 20 FEB, 1944

## CARGO TOWPLANE AND CG-4A GLIDER

TOWPLANE & GLIDER COMBINATION	LOADING						TAKE OFF (WITH GLIDER ATTACHED) S.L.-HARD SURFACE-NO WIND			CLIMB (AT MINIMUM TOW SPEED)				RANGE & ENDURANCE (AT CRUISING POWER) STATUTE AIR MILES-NO WIND-NO RESERVE						REMARKS
	GLIDERS			TOWPLANE			TO CLEAR 50' OBJ. DISTANCE (FT.)	TAKE OFF SPEED (M.P.H.)	GROUND RUN DISTANCE (FT.)	I.A.S. FOR CLIMB (M.P.H.)	INITIAL RATE OF CLIMB (FT./MIN.)	SERVICE CEILING (FT.)	TIME TO SERVCE CEL. (MIN.)	RADIUS OF ACTION (GLIDER RELEASED AT RADIUS)			RECOMM. CRUISING ALTITUDE (FT.)	MAX. RANGE (WITH GLIDER)		
	TAKE-OFF WEIGHT (LB.)	CARGO OR PASS. (LB.)	TAKE-OFF WEIGHT (LB.)	BOMB- CARGO OR PASS. (LB.)	FUEL (U.S. GAL.)	MAX. TOW SPEED (M.P.H.)								RADIUS (MI.)	TIME OUT (HRS.)	TIME BACK (HRS.)		RANGE (MI.)	ENDUR. (HRS.)	
C-46A & (1)CG-4A	7500	3800	45000	3000	1400	150	5150	95	3500	125	275	10000	4.7	650	5.3	3.8	5000	950	7.8	BETTER PERFORMANCE EXPECTED UPON FURTHER FLIGHT TESTING.
C-46A & (2)CG-4A	7500	3800	45000	3000	1400	150	8300	95	5650	120	100	3000	3.0	410	3.6	2.7	1000	530	4.7	AS ABOVE
C-47, 47A & 53 (STD. BLADE PROPS.) & (1)CG-4A	7500	3800	26000	3000	804	150	4425	90	3000	120	275	11350	4.4	560	4.6	4.4	5000	830	6.8	
C-47, 47A & 53 (PADDLE BLADE PROPS.) & (1)CG-4A	7500	3800	26000	3000	804	150	4075	85	2825	105	425	12000*	3.0	610	5.7	4.7	5000	950	9.1	*LIMITED- NO OXYGEN IN GLIDER
	7500	3800	29000	6000	804	150	5625	85	3800	105	350	11800	4.2	570	5.0	4.4	5000	875	7.6	
	7500	3800	31000	8000	804	150	6175	90	4175	105	300	11300	5.3	510	4.1	3.8	5000	740	6.4	
C-47, 47A & 53 (PADDLE BLADE PROPS.) & (2)CG-4A	7500	3800	29000	6000	804	150	7250	85	4450	105	125	8000	5.7	395	3.7	3.3	2000	518	4.5	* TO 3000 FT. ALTITUDE
	7500	3800	31000	8000	804	150	8850	90	5550	105	80	-	3.8*	370	3.4	3.1	1000	470	4.4	
C-60A & (1)CG-4A	7500	3800	18500	NONE	644	150	4000	85	2750	120	550	12000*	3.7	580	4.7	4.0	5000	940	7.9	* LIMITED- NO OXYGEN IN GLIDER
	7500	3800	21500	3000	644	150	5425	85	3675	120	320	11500	4.8	410	3.4	2.8	5000	560	4.7	
C-60A & (2)CG-4A	4700	1000	18500	NONE	644	150	6200	85	4100	120	250	8000	4.0	360	2.8	2.5	5000	540	4.6	
	7500	3800	18500	NONE	644	150	7000	85	4500	120	200	7300	4.1	330	2.9	2.4	5000	475	4.0	

## NOTES:

- (1) REFERENCE MATERIAL FROM TECHNICAL ORDER 01-1-143 dated 1 DEC. 1943.  
 (2) ALL PERFORMANCE SHOWN WITH GLIDER TRAINING GEAR ATTACHED.

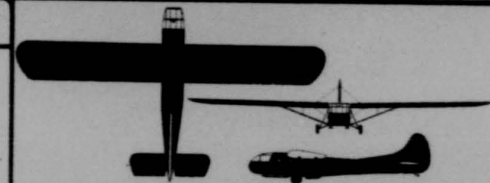
RED FIGURES ARE PRELIMINARY; SUBJECT TO REVISION AFTER FLIGHT CHECK.

TOW PLANE PERFORMANCE WITH CG-4A TO BE SAME AS WITH CG-4A

## GLIDER CHARACTERISTICS

## WEIGHT

B-BASIC  
 C-COMBAT  
 W-WAR MAX.



## SIZE

S-SPAN  
 L-LENGTH  
 H-HEIGHT  
 T-TREAD  
 W-WING AREA

## TYPICAL GLIDER CAPACITIES

B- (3700 to 4500)  
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S- 83'8"  
 L- 45'4"  
 H- 12'7"  
 T- 9'4"  
 W- (Tact. gear) 852 SQ. FT.

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