

THIS PAGE IS UNCLASSIFIED

20313
May 1944

X-56658

M1091-9

EE-203

U.S.
95
air
(Spec)

TACTICAL PLANNING

Characteristics & Performance Chart

DECLASSIFIED
DOD DIR 5200.9, 2Z See 5B

NOTICE: This document contains information affecting the National Defense of the United States within the meaning of the Espionage Act, 50 U. S. C., 31 and 32, as amended. Its transmission or the revelation of its contents in any manner to an unauthorized person is prohibited by law.

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

10-1626

1-MAY-1944

WF-4-29-44-725

BOMBER

CARGO

FIGHTER

THIS PAGE IS UNCLASSIFIED

A-56658

M1091-9

EE-308

*U.S. 0
9570
airplanes
(fuel tank)*

TACTICAL PLANNING

Characteristics & Performance Chart

BOMBERS

CARGO

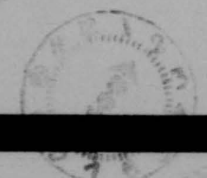
FIGHTERS

DECLASSIFIED
DOD DIR 5200.2, 2Z See 5B

NOTICE: This document contains information affecting the National Defense of the United States within the meaning of the Espionage Act, 50 U. S. C., 31 and 32, as amended. Its transmission or the revelation of its contents in any manner to an unauthorized person is prohibited by law.

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

1944



THIS PAGE IS UNCLASSIFIED

FOREWORD

This chart replaces the Monthly Chart of Airplane Characteristics and Performance EE-306-1, "Production". The latter was frequently misinterpreted and therefore general distribution was discontinued on directive from higher authority. This issue covers typical models now in theater operation and the list will be increased from month to month as rapidly as the data can be compiled.

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.

WARNING

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

Performance is based on the requirements of AAF Spec. 40107B, "Pilots' Handbooks, Flight Operation Instructions", which sets forth specific allowances for practical service operation. Take-off and landing distances are 125% of optimum on hard surface, no wind, standard temperature. Weights are "Basic" weight plus crew, oil, full ammunition, fuel and bombs, cargo, passengers or troops as applicable. For bombers and cargo, "Recommended Limit" and "War Maximum" weights are based on limiting applied positive maneuver factors of 2.67G and 2.00G respectively unless otherwise specified. Time to climb is minimum within published engine limits. In future issues speed and climb with "Military Power" will be replaced with "War Emergency" when applicable. 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 similar variables. (For example, range varies day and night due to fuel expansion prior to take-off.)
- e. Other than the above, no allowance for wind, assured reserve, combat nor formation flight.

PREPARED BY TECHNICAL DATA LABORATORY OF THE ENGINEERING DIVISION.

"THIS REPORT SUPERSEDES PREVIOUS EE-393 PUBLICATIONS; SUPERSEDED PUBLICATIONS, IF NO LONGER OFFICIALLY REQUIRED, WILL BE DESTROYED IN THE MANNER PRESCRIBED IN PARAGRAPH 23, A.R. 380-5, DATED 28 SEPT. 1943."

THIS PAGE IS UNCLASSIFIED

DEFINITIONSCHARACTERISTICS

SUPERCHARGER: "TURBO" INDICATES EXHAUST DRIVEN TURBINE WITH SINGLE SPEED INTEGRAL DIFFUSER.

BHP/ALT.: BRAKE HORSEPOWER PER ENGINE AT CRITICAL ALTITUDE WITH RAM.

T: MAXIMUM POWER FOR TAKE-OFF.

M: MAXIMUM POWER FOR COMBAT AT ALTITUDE SHOWN, (usually limited to 15 min. duration)

we: WAR EMERGENCY POWER FOR COMBAT AT ALTITUDE SHOWN, (limited to 5 min. duration only)

C: MAXIMUM POWER FOR CONTINUOUS OPERATION.

Note: Max. cruise power is the maximum power for unlimited operation with lean mixture.

SIZE: APPROX. DIMENSIONS FOR STORAGE PLANNING.

LENGTH: DOES NOT INCLUDE PROTRUDING GUNS.

HEIGHT: MAXIMUM IN THREE POINT POSITION.

WING AREA: STANDARD AERODYNAMIC SURFACE AREA.

TREAD: CENTER TO CENTER MAIN WHEELS:(OUTBOARD IF DUAL).

WEIGHTS: APPROXIMATE AVERAGES FOR PLANNING PURPOSES

B: BASIC WEIGHT INCLUDES WEIGHT EMPTY, TRAPPED FUEL AND OIL, EQUIPMENT, ARMAMENT, ETC. BUT DOES NOT INCLUDE DISPOSABLE FUEL, OIL, DROPPABLE TANKS, AMMUNITION, BOMBS, CARGO, NOR CREW.

C: COMBAT WEIGHT IS BASED ON LATEST CONFIRMED INFORMATION FROM THEATERS AND USUALLY INCLUDES FULL BUILT-IN FUEL, FULL AMMUNITION, AND AN ARBITRARY BOMB OR CARGO LOAD.

R: RECOMMENDED LIMIT ON GROSS WEIGHT WHICH WILL ALLOW A LIMIT APPLIED POSITIVE MANEUVER FACTOR OF AT LEAST 2.67g.

W: WAR MAX. WEIGHT FOR SPECIAL MISSIONS ONLY.

FUEL: STANDARD FUEL TANKAGE AND CAPACITIES.

ARMAMENT: RESUME' OF INFORMATION IN THE "ARMAMENT & BOMB INSTALLATIONS" (CHART EE-306A)

BOMBS: MAXIMUM RACK CAPACITY FOR STANDARD SIZES.

CARGO: CARGO, PASSENGER OR TROOP CAPACITIES.

MAX. LOAD: ONE SIZE ONLY ON EACH BOMB RACK (in some cases a reduction in fuel load is required) PRACTICAL TOTAL CARGO BASED ON GR. WT.

RADIO: RESUME' OF TYPICAL MODELS INSTALLED.

PERFORMANCE

RED PRINT: PRELIMINARY ESTIMATES OR CALCULATED DATA

TAKE-OFF & LANDING: VALUES ARE AT LEAST 125% OF OPTIMUM
(At 3000' RUNWAY ALT.)

GROSS WEIGHT: ARBITRARY VALUES FOR REFERENCE ONLY
TO CLEAR 50': DISTANCES REPRESENTATIVE OF MINIMUM AIRPORT REQUIREMENTS.

GROUND RUN: DISTANCES REPRESENTATIVE OF MINIMUM RUNWAY REQUIREMENTS.

LANDING SPEED: PRACTICAL MINIMUM FOR AVERAGE PILOT.

HIGH SPEED & CLIMB: VALUES ARE FOR CLEAN NEW AIRPLANES

MILITARY POWER: FOR LIMITED PERIODS OF COMBAT OPERATION

WAR EMERGENCY POWER: (Performance with War Emergency ratings are shown when applicable)

MAX. CONTINUOUS: FOR UNLIMITED PERIODS OF OPERATION INCLUDING EMERGENCY HIGH-SPEED CRUISING.

TIME OF CLIMB: MINIMUM TIME TO CLIMB FROM SEA LEVEL BASED ON MILITARY POWER CLIMB FOR ALLOWABLE TIME AND MAXIMUM CONTINUOUS POWER CLIMB FROM THEN ON.

RANGE & ENDURANCE: SEE DISCUSSION IN "FOREWORD", PAGE I.

TAKE-OFF WEIGHT: BRIEF LIST OF TYPICAL GROSS WEIGHTS.

BOMBS, ETC. : TYPICAL LOADINGS COMBINED WITH VARIOUS TANK CAPACITIES. NO CONSIDERATION IS GIVEN TO LOADINGS REQUIRING PARTIALLY FILLED TANKS.

NOTE: Take-off weights with corresponding load and fuel quantity applies to all values to the right on the same line.

MAX. CONT. POWER: HIGH SPEED CRUISING WITH RICH MIXTURE (For emergency cruising only)

MAX. CRUISE POWER: MAXIMUM CONTINUOUS OPERATION WITH LEAN MIXTURE SETTING.

LONG RANGE: PRACTICAL MAXIMUM RANGE FOR PLANNING PURPOSES UNDER ALL CONDITIONS SET FORTH.

DECLASSIFIED
DOD DIR 5200.9, 27 Sep 58

THIS PAGE IS UNCLASSIFIED

CONFIDENTIAL

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 TR. TAIL...FLEX.MT.	2-2000 6-1600 6-1000 12- 500 16- 250 21- 100	NONE	9600	2550
B-17F-80 (-30 thru -50)	NONE 1) 2) 2) 2) 2)	NONE 300 b 300 400 500 565	NOSE...FLEX. RADIO COMPART. SIDE WAIST-FL. UPPER TURRET LOW BALL TR. TAIL...FLEX.MT.	2-2000 6-1600 6-1000 12- 500 16- 250 21- 100	2-4000 2-2000 2-4000x	6-1600 17600	AS ABOVE
B-17F-80 -55 thru 1st.30(-85)	2) 1) 2) 2) 2)	300 300 300 400 500 565	NOSE...FLEX. RADIO COMPART. SIDE WAIST-FL. UPPER TURRET LOW BALL TR. TAIL...FLEX.MT.	A S	A B O V E		2550 (-55 thru 1st.75-80 3630 (Last 27 -80 & SUB.
B-17F-80 Last 70(-85) thru -130	3) 1) 2) 2) 2)	300 300 300 400 500 565	NOSE...FLEX. RADIO COMPART. SIDE WAIST-FL. UPPER TURRET LOW BALL TR. TAIL...FLEX.MT.	AS ABOVE EXCEPT THAT EXTERNAL BOMB RACKS DELETED AFTER 15th.(-95)			3630
B-17G-80 (-1 thru -110)	2) 1) 2) 2) 2)	300 365 300 500 d 400 500 565	CHEEK...FLEX. CHIN TURRET RADIO COMPART. SIDE WAIST-FL. UPPER TURRET LOW BALL TR. TAIL...FLEX.MT.	2-2000 6-1600 6-1000 12- 500 16- 250 21- 100	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	NOSE...FLEX. SIDE WAIST-FL. UPPER TURRET LOW BALL TR. TAIL...FLEX.MT.	2-2000 6-1600 6-1000 12- 500 16- 250 21- 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 TR. TAIL...FLEX.MT.	AS ABOVE	PROV. FOR EXTERNAL RACKS 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 RACKS	AS ABOVE	3630
B-17F-DL Last 19(-35) thru -65	3) 1) 2) 2) 2)	300 300 300 400 500 565	NOSE...FLEX. RADIO COMPART. SIDE WAIST-FL. UPPER TURRET LOW BALL TR. TAIL...FLEX.MT.	A S	A B O V E	AS ABOVE	AS ABOVE
B-17G-DL (-1 thru -40)	2) 1) 2) 2) 2)	300 365 300 500 d 400 500 565	CHEEK...FLEX. CHIN TURRET RADIO COMPART. SIDE WAIST-FL. UPPER TURRET LOW BALL TR. TAIL...FLEX.MT.	AS ABOVE	A B O V E	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. 12 AIRPLANES; NOSE GUN DELETED ON NEXT 28 THRU (-10). NO RADIO COMPARTMENT GUN UNTIL LAST 14(-15). OTHER ARMAMENT AS B-17F.	500	NOSE GUN	2-2000 6-1600 6-1000 12- 500 16- 250 21- 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-FL. UPPER TURRET LOW BALL TR. TAIL...FLEX.MT.	AS ABOVE	EXTERNAL RACKS 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 17600	2550 (B-17F-25) 3630 (B-17F-30)
B-17F-VE (-35 thru -50)	3) 1) 2) 2) 2)	300 300 300 400 500 565	NOSE...FLEX. RADIO COMPART. SIDE WAIST-FL. UPPER TURRET LOW BALL TR. TAIL...FLEX.MT.	AS ABOVE	NONE	9600	3630
B-17G-VE (-1 thru -90)	2) 1) 2) 2) 2)	300 365 300 500 d 400 500 565	CHEEK...FLEX. CHIN TURRET RADIO COMPART. SIDE WAIST-FL. UPPER TURRET LOW BALL TR. 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

GENERAL NOTE:

LATEST INVESTIGATION SHOWS THAT 6x1600 LB.
ARMOR PIERCING BOMBS MAY BE CARRIED, BUT
BOMB RAIL LOAD FACTORS AND CLEARANCES ARE
REDUCED AND MANEUVERING OF AIRPLANE MUST
BE LIMITED ACCORDINGLY.

CONFIDENTIAL

THIS PAGE IS UNCLASSIFIED

PAGE 5
AS OF
DATE 27 APR. 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 OR STATION	EXTERNAL NO. & SIZE OR CAPACITY			MAX. LOAD LB.	TYPE
B-17F	4	WRIGHT R-1820-97 TURBO HAMILTON STD. 11"7" DIA. - 3BL. F.P. HYDROMATIC	T 1200/3 L 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 64000	9	MAIN - WINGS BOMB BAY	6-1730 2x 410 2550 TOT	2) 300 1) .50 2) 300 2) 500 2) 565	NOSE - FLEX. SIDE WAIST-FL. RADIO COMPART. UPPER TURRET LOW BALL TURRET TAIL - FLEX. MT.	2-2000 C 6-1600 6-1000 12- 500 16- 250 24- 100	2-4000 2-2000 2-1600 2-1000	C 6-1600 b 2-4000 17600	SEE NOTE (B)	TECHNICAL ORDER 01-202P-1. (1 OCT. 1943) EXTERNAL BOMBS ON SOME MODELS ONLY.			
B-17F (WITH WING TIP TANKS)	4	AS ABOVE	AS ABOVE	AS ABOVE	B 36000 C 55000 R 56000 W 64000A	9	MAIN - WINGS WING TIPS BOMB BAY	6-1730 2x 540 2x 410 3630 TOT	3) 300 2) 300 1) .50 2) 300 2) 500 2) 565	NOSE - FLEX. SIDE WAIST-FL. RADIO COMPART. UPPER TURRET LOW BALL TURRET TAIL - FLEX. MT.	A S	A B O V E	AS ABOVE	A S A B O V E				
B-17G	4	AS ABOVE	AS ABOVE (SEE *)	S 103'9" L 74'4" H 19'1" T 21'2" W 1120 SQ. FT.	B 36000 C 55000 R 56000 W 64000A	9	AS ABOVE EXCEPT PROVISIONS ONLY FOR THE BOMB BAY TANKS	6-1730 2x 540 2x 410 3630 TOT	3) 300 2) 300 1) .50 2) 300 2) 500 2) 565	NOSE - 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 01-202P-1. (1 OCT. 1943) * LATEST B-17G'S HAVE NEW TYPE SUPERCHARGER (B-22) GIVING INCREASED ALTITUDE PERFORMANCE. * LATER MODELS HAVE 600 RDS./MIN. EARLY MODELS 300 RDS./MIN. * LENGTH INCREASED 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						
	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 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. RANGE MILES	ENDUR. HOURS	AT 25000 FT. RANGE MILES	ENDUR. HOURS		AT 10000 FT. RANGE MILES	ENDUR. HOURS	AT 25000 FT. RANGE MILES	ENDUR. HOURS	AT 10000 FT. RANGE MILES	ENDUR. HOURS
B-17F	40000 50000 55000 56000	- - 3950 4100	3900 4750 5200	90 100 104 105	- - 3050 3050	2000 2700 3050	55000	30000 25000 20000 15000 10000 5000	298 299 288 274 263 252	400 725 850 950 1050 1125	260 274 266 255 245 236	225 450 550 675 750 #	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 64000	- - 3950 4100 4300 6100	3900 4750 5200	90 100 104 105	- - 3050 3050	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	65500 59500 63500 59000 65500	NONE NONE 4000 6000 6000	3630 2810 2810 1730 2800	1100 1100 850 1400	6.1 6.1 3.7 6.0	1550 1550 900 1500	6.2 6.2 3.8 6.0	2050 2050 1250 2000	10.1 10.1 6.1 10.0	2150 2100 1250	9.9 9.9 5.9	2800 2700 1700	21.2 17.4 10.5 17.2	* MAX. FERRY RANGE MAY BE RESTRICTED BY INSUFFICIENT OIL IF ENGINE IS NOT IN BETTER THAN AVERAGE CONDITION; OIL CONSUMPTION 5 QT. TO 3 GAL./HR. DEPENDING ON TIME SINCE OVERHAUL. LONG RANGE VALUES BASED ON CONSTANT M.P.H. * PERFORMANCE DATA ABOVE 65000 LB. NOT EXT. AVAILABLE. SEE NOTE (A). * PERFORMANCE DATA NOT AVAILABLE WITH TYPE B-22 SUPERCHARGER.	
B-17G		A S	A B O V E				55000	30000 25000 20000 15000 10000 5000	299* 299 279 266 255 244	300* 675 800 900 1000 1075	272 266 258 247 238 229	225 400 550 675 750 #	54.2 37.8 26.8 18.0 10.6 1.2	65500 59500 63500 59000 65500	NONE NONE 4000 6000 6000	3630 2810 2810 1730 2800	1350 1350 800 1450	6.1 6.1 3.7 6.0	1500 1500 850 1500	6.2 6.2 3.8 6.0	1950 1950 1100 1900	10.1 10.1 6.1 10.0	2050 2050 1150	9.8 9.8 5.8	2500 2400 1500	17.4 17.4 10.5	

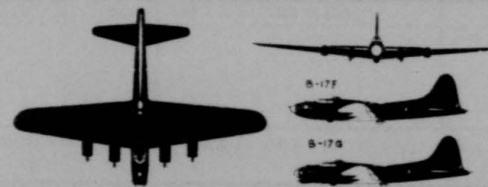
NOTES: (B)

24 VOLT RADIO SYSTEM
SCR-211 FREQUENCY METER
SCR-2690 RADIO COMPASS
SCR-274N COMMAND SET
SCR-287A LIAISON SET
SCR-695 SET (or SCR-995)
SCR-578 EMERGENCY TRANSMITTER
RC - 32 FILTER EQUIPMENT (or RC-198)
RC - 36 INTERPHONE AMPLIFIER
RC - 43B MARKER BEACON
RC - 103 BLEND LANDING (Provisions only)
SCR-522 COMMAND SET

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

- (A) THEATER REPORTS INDICATE LOADINGS IN EXCESS OF 65000 LB. ARE BEING USED WITH INCREASE IN ARMAMENT & HEAVIER BOMB-FUEL COMBINATIONS THAN LISTED UNDER "RANGE & ENDURANCE". DETAILS & RESULTANT PERFORMANCE ARE UNDER INVESTIGATION.
(C) LATEST INVESTIGATION SHOWS THAT 6x1600 LB. ARMER PIERCING BOMBS MAY BE CARRIED, BUT BOMB RAIL LOAD FACTORS AND CLEARANCES ARE REDUCED & MANEUVERING OF AIRPLANE MUST BE LIMITED ACCORDINGLY.

MANUFACTURED BY BOEING - DOUGLAS - VEGA



B-17
"FORTRESS"

CONFIDENTIAL

THIS PAGE IS UNCLASSIFIED

CONFIDENTIAL

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) 2)	.50 200 400	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) 1) 2)	.50 200 400 100	NOSE.....FLEX. UPPER TURRET TUNNEL...FLEX. TAIL TURRET	A S	A B O V E		2364 Last 36(-15) 3614 -20 & sub.
B-24D-CO -25 thru 1st. 26(-140)	3) 2) 2) 1) 2)	.50 100 250 400 100 400	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	3614
B-24D-CO Last 9(-140) thru -170	3) 2) 2) 2) 2)	.50 100 250 400 508 400	NOSE.....FLEX. SIDE WAIST..FL. UPPER TURRET LOW.BALL TRR. TAIL TURRET	A S	A B O V E		AS ABOVE
B-24J-CO (-1 thru -200)	2) 2) 2) 2) 2)	.50 400 250 400 508 400	NOSE TURRET SIDE WAIST..FL. UPPER TURRET LOW.BALL TRR. TAIL TURRET	A S	A B O V E		AS ABOVE

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

CONSOLIDATED (FT. WORTH) "CF"

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) 1) 2)	.50 100 250 400 100 400	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	NONE	12800	AS ABOVE
B-24J-CF (-1 thru -20)	2) 2) 2) 2)	.50 400 250 400	NOSE TURRET SIDE WAIST..FL. UPPER TURRET LOW.BALL TRR. TAIL TURRET	A S	A B O V E (SEE a)		AS ABOVE
B-24H-CF (-1 thru -15)	2) 2) 2)	.50 400 508 400	NOSE TURRET SIDE WAIST..FL. UPPER TURRET LOW.BALL TRR. TAIL TURRET	A S	A B O V E		AS ABOVE
B-24H-CF (-20 thru -30)	2) 2) 2) 2) 2)	.50 400 250 400 508 400	NOSE TURRET S.WAIST-16 MT. UPPER TURRET LOW.BALL TRR. TAIL TURRET	A S	A B O V E		AS ABOVE
B-24J-CF (-401 to -)	A	S	A	B	O	V	E

NOTES: a B-10 SHACKLES FOR 8-1600 LB. BOMBS START ON 2101st. FORD KNOCK-DOWN SET.
B-24H-CF AIRPLANES RECEIVE NEW B-24J DESIGNATIONS WHEN C-1 AUTOMATIC PILOT & M-9 BOMB SIGHT REPLACE A-5 AUTOMATIC PILOT & S-1 BOMB SIGHT.

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) 2)	.50 400 250 400 508 400	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
B-24E-FO (-1 thru -15) (FORD)	A S	A B O V E		A S	A B O V E		AS ABOVE
B-24E-DT & FO (-20 thru -30)	2) 2) 2) 2) 2)	.50 400 250 400 508 400	NOSE TURRET S.WAIST-16 MT. UPPER TURRET LOW.BALL TRR. TAIL TURRET	A S	A B O V E		AS ABOVE
B-24J-DT & FO (-1)	A	S	A	B	O	V	E

NOTES: a B-10 SHACKLES FOR 8-1600 LB. BOMBS STARTS ON 2101st. FORD KNOCK-DOWN SET.
B-24E-DT & FO AIRPLANES RECEIVE NEW B-24J DESIGNATIONS WHEN C-1 AUTOMATIC PILOT & M-9 BOMB SIGHT REPLACE A-5 AUTOMATIC PILOT & S-1 BOMB SIGHT.

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 (-1 thru -15)	3) 2) 2) 2) 2)	.50 230 TOT. 250 400 508 400	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) 2)	.50 400 250 400 508 400	NOSE TURRET SIDE WAIST..FL. UPPER TURRET LOW.BALL TRR. TAIL TURRET	A S	A B O V E		AS ABOVE
B-24J-NT (-10 thru -15)	A S	A B O V E		4-2000 8-1600 8-1000 12- 500 12- 250 20- 100	NONE	12800	AS ABOVE
B-24J-NT (-1 & -5)	A	S	A	B	O	V	E

NOTES: a LOWER BALL TURRET ON 5th. & SUBSEQUENT; NO TUNNEL GUN ON 1st. 4. ARTICLES.
B-24G-20-NT AIRPLANES ARE DESIGNATED B-24J-1, ETC. WHEN C-1 AUTOMATIC PILOT & M-9 BOMB SIGHT REPLACE A-5 AUTOMATIC PILOT & S-1 BOMB SIGHT.

CONFIDENTIAL

THIS PAGE IS UNCLASSIFIED

TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART																	PAGE 7
CONFIDENTIAL																	AS OF:
																	DATE 27 APR 1944
MODEL & BLOCK NO.	ENGINE & PROP.		SIZE		WT.		COMBAT CREW	FUEL		ARMAMENT			BOMBS-CARGO-PASS.		RADIO	REMARKS & REFERENCE	
	NUMBER	ENGINE MFGR. MODEL SUPERCHARGER PROP MFGR. 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-24D	4	PRATT-WHITNEY R-1830-13 TURBO HAMILTON STD. 11'7" DIA. - 3EL. P.P. HYDROMATIC	T 1200/S L M 1200/25000 C 1100/25000	S 110'0" L 66'4" H 18'0" T 25'8" W 104'8" SQ. FT.	B 34500 C 56000 R 56000 W 64000	8	MAIN - WINGS	12-2364	3) 100 2) 250 1) 100 2) 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	SEE NOTE (B)	TECHNICAL ORDER 01-520-1 (10 NOV. 1943)		
B-24D (WITH BOMB BAY TANKS)	4	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	8	MAIN - WINGS BOMB BAY	12-2364 2x 400 3164 TOT	3) 100 2) 250 1) 100 2) 400	NOSE - FLEX. SIDE WAIST-FL. UPPER TURRET LOW BALL TURRET TAIL TURRET	A S	A B O V E	AS ABOVE	AS ABOVE	A S A B O V E		
B-24D (WITH WING TIP TANKS)	4	AS ABOVE EXCEPT R-1830-65 ENGINE IN LIEU OF -13 ON B-24D-20-CP & B-24D-135-00 thru -170-00.	1200/S L 1200/26500 1100/27000	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	A S A B O V E	AS ABOVE	A S	A B O V E	AS ABOVE	AS ABOVE	AS ABOVE	(A) SEE FOOT NOTE "A"	
B-24G,H & J	4	AS ABOVE EXCEPT R-1830-65 ENGINE IN LIEU OF -13 ON B-24D-5-WT & sub; B-24D-5-CP sub; B-24D SERIES.	AS ABOVE (SEE e)	S 110'0" L 67'2" H 18'0" T 25'8" W 104'8" SQ. FT.	B 37500 C 56000 R 56000 W 64000A	8	AS A B O V E	2) 100 2) 250 2) 508 2) 400	NOSE TURRET *SIDE WAIST-FL. UPPER TURRET LOW BALL TURRET TAIL TURRET	A S	A B O V E	AS ABOVE	AS ABOVE	AS ABOVE	TECHNICAL ORDER 01-520-2 (25 FEB. 1944) LATEST B-24J MODELS HAVE NEW TYPE SUPERCHARGER (B-22) GIVING INCREASED ALTITUDE PERFORMANCE. BEING INCREASED TO 500 RDS/NO EFFECTIVE POINT YET. FEW EXTERNAL BOMB RACKS BEING INSTALLED AT MOD. CENTERS. (K-6) MOUNT AT SIDE WAIST POS. ON B-20ASUBS. (CP, DT & FO)		

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	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								
LB.	T.O. DIST. FT.	LAND. DIST. FT.	LANDING SPEED M.P.H.	T.O. DIST. FT.			LAND. DIST. FT.	HIGH SPEED	RATE OF CLIMB FT./MIN.	HIGH SPEED				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			
B-24D	40000	-	3300	90	-	2800	30000	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 BOMB BAY TANKS)	40000	-	3300	90	-	2800	25000	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-24D (WITH WING TIP TANKS)	40000	-	3300	90	-	2800	20000	277	1150	272	950	14.5	60000	NONE	3614	1200	5.1	1300	5.1	2400	12.1	2500	11.5	3100	20.3	
B-24G,H & J	40000	-	3300	90	-	2800	30000	278	850	278	700	35.5	64500	NONE	3614	-	-	-	-	-	-	-	-	3500	22.2	MAX. PERFORM. DATA WITH TYPE B-22 SUPERCHARGER NOT AVAILABLE.

- NOTES: (B) 24 VOLT RADIO SYSTEM
- SCR-211 FREQUENCY METER
 - SCR-2690 RADIO COMPASS
 - SCR-2718 COMMAND SET
 - SCR-287A LIAISON SET
 - SCR-695 SET (or SCR-995)
 - 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 (AFR-1) (Installed in some models)

RED FIGURES ARE PRELIMINARY - SUBJECT TO REVISION AFTER FLIGHT CHECK

* MILITARY POWER AVAILABLE FOR 5 MINUTES ONLY.

(A) THERMIST REPORTS INDICATE LOADINGS IN EXCESS OF 65000 LB. ARE BEING USED WITH INCREASE IN AMMUNITION & HEAVIER BOMB-FUEL COMBINATIONS THAN LISTED UNDER "RANGE & ENDURANCE". DETAILS & RESULTANT PERFORMANCE ARE UNDER INVESTIGATION.



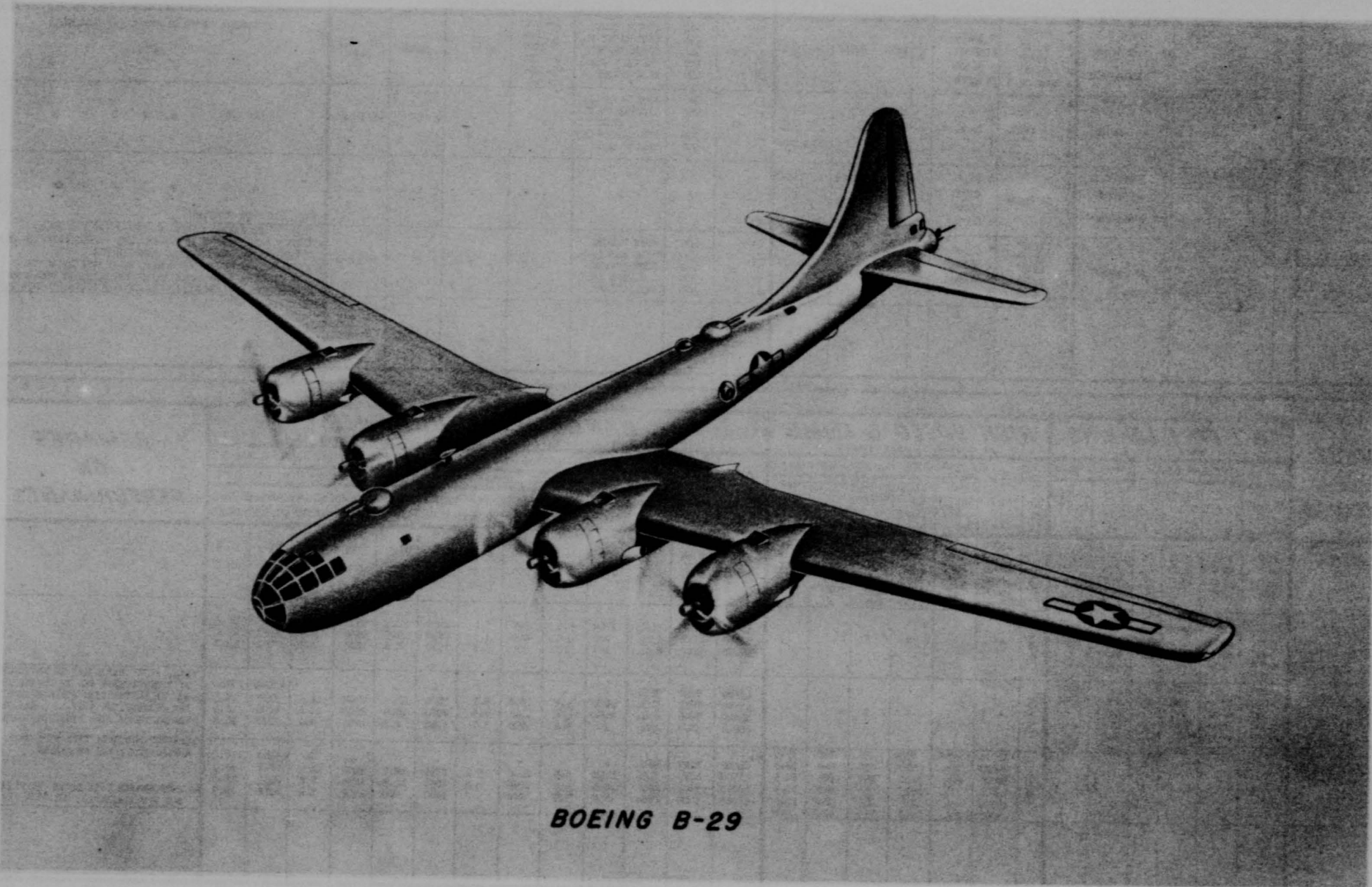
B-24
"LIBERATOR"

MANUFACTURED BY CONSOLIDATED - FORD - DOUGLAS - NORTH AMERICAN

CONFIDENTIAL

THIS PAGE IS UNCLASSIFIED

CONFIDENTIAL



BOEING B-29

CONFIDENTIAL

THIS PAGE IS UNCLASSIFIED

TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART																	
CONFIDENTIAL																	
PAGE 9 13 OF DATE 27 APR 1944																	
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-RECLIM W-WAR MAX	COMBAT CREW		TANK TYPE OR LOCATION	NO. TANKS & CAPACITY U.S. GAL.	NO. GUNS & PER GUN CALIBER	RDS LOCATION & TYPE	INTERNAL NO. & SIZE STATION				EXTERNAL NO. & SIZE CAPACITY	MAX. LOAD LB.
B-29-BW -1 TO -20 INCL B-29-BN -1 B-29-BA -1 & -5	4	WRIGHT R-3350-23 TURBO HAMILTON STD. 16.7" DIA. - 4 BL. F.F. HYDROMATIC	T 2200/3 L M 2200/25000 C 2000/25000	S 111'3" L 99'0" H 27'9" T 31'6" W 1739 SQ. FT.	B 71000 C 105000 R 120000 W 152000	10	OUTER - WINGS INNER - WINGS BOMB BAY	11-2735 8-2875 4x 640 2168 TOT	1-203M 2) 2) 2) 2)	100 1000 1000 1000 1000	TAIL-M2, TYPE B UPPER REAR TRJ UPPER REAR TRJ LOWER REAR TRJ LOWER REAR TRJ TAIL-POWER HT.	1-4000 5-2000 12-1500 12-1000 10-500	NONE	20000 SEE (A)	SEE NOTE (B)	TECHNICAL ORDER 01-20EJ-1 (25 JAN. 1944) F-40-105 NOT ON B-29-1-BW. A- OUTBOARD TREAD-31'6"; INBOARD TREAD- 25'8".	
			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												
			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					
	TO CLEAR 50'		LANDING SPEED	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		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.		RANGE ENDUR.	RANGE ENDUR.	RANGE ENDUR.	RANGE ENDUR.	RANGE ENDUR.
B-29-BW -1 TO -20 INCL B-29-BN -1 B-29-BA -1 & -5	90000 105000 120000	3150 1500 6100	100 110 120	2000 3150 1700	2500 3000 -	105000	30000 25000 20000 15000 10000 5000	270 350 310 330 317 303	520 740 900 1040 1160 1250	750 917 930 800 797 803	340 550 715 850 970 1060	40.0 29.0 21.0 15.0 10.0 5.0	120000 120000	NONE 9000 (SEE NOTE A)	6888 5608	1800 1500	6.8 5.5	2000 2000	6.8 5.5	3500 2200	15.2 12.2	2900 2200	10.9 8.1	1200 3300	21.5 16.9	* MOST OF FLIGHT REQUIRES THAT MAX. CRUISE POWER BE EXCEEDED SLIGHTLY BY USING AUTO. RICH MIXTURE.

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.

NEW WEAPONS AND EQUIPMENT: SUBJECT TO REVISION AFTER FLIGHT CHECK

- (B) AN-ARC-6 LIAISON SET
- SC-2590 COMPASS FOR AN-ARC-7
- SC-51288 MARKER BEACON
- SC-103 GLID. PATH RECEIVER
- AN-244-0 LOCALIZER RECEIVER
- SC-18 INTERPHONE (OF AN-ARC-2)
- SC-825 IFF
- SC-870 EMERGENCY TRANSMITTER
- SC-710 HIGH ALTITUDE ALTIMETER
- AN-APD-13 HIGH ALTITUDE RADAR
- RA-16 ACW
- AN-AL-1 STATIC DISCHARGER
- AN-AR-1 28 ADAPTER (SOME PLAINS ONLY)
- PROVISIONS FOR AN-AP-4 LOAN
- SC-102 VHF (SOME PLAINS ONLY)

MANUFACTURED BY: (BOEING (WICHITA) "BW"
(BOEING (RENTON) "BN"
(BELL (ATLANTA) "BA")



B-29

"SUPER FORTRESS"

CONFIDENTIAL

THIS PAGE IS UNCLASSIFIED

TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART																	
CONFIDENTIAL																	
PAGE 11 AS OF: DATE 27 APR 1944																	
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			
B-32 CF	WRIGHT R-3350-23 TURBO CURTISS 16" DIA. - 1,810 COMPT. SP. - ELECT.	T 2200/5 L M 2200/30000 C 2000/32500	S 135' 0" L 82' 11" H 28' 0" T 28' 0" W 1122 SQ. FT.	B 62670 C 100000 R 102800 W 123250	4	INNER CENTER - 5226 OUTER CENTER - 5226 (SEE #)	2) 365 2) 400 2) 550 2) 1000	2) .50 2) 550 2) 1000	NOSE TURRET FRONT TOP TRR. REAR TOP TRR. LOW BALL TRR. TAIL TURRET	4-1000 8-2000 8-1500 16-1000 40- 500	NONE	20000	SCR-274N 211,359 287,522 695 & 718 RD-36,103 193 & 196	(MANUFACTURER'S PRELIMINARY ESTIMATES) a 365 RDS./GUN (SERIAL); SPACE PROVISIONS FOR 600 RDS./GUN b MAXIMUM WING TANK CAPACITY-5226 GAL; OVERLOAD CONDITIONS WITH 5226 GAL. ASSUMES 3000 GAL. CARRIED IN FUS. c RADIO LISTED FOR EXP. PLANES & FIRST FEW PROD. ARTICLES.			
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 HIGH SPEED	MAX. CONTIN. POWER RATE OF CLIMB	HIGH SPEED RATE OF CLIMB	TIME TO CLIMB	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.									AT 10000 FT.	AT 25000 FT.		AT 10000 FT.	AT 25000 FT.	RANGE	ENDUR.	RANGE	ENDUR.
B-32-CF							NO	RELIABLE														
NOTES:																						
MILITARY POWER AVAILABLE FOR 5 MINUTES.																						



B-32

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

CONFIDENTIAL

THIS PAGE IS UNCLASSIFIED

CONFIDENTIAL

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

12

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	300 300 200	NOSE... FLEX. NOSE... FIXED UPPER TURRET	1-2000 3-1000 6- 500	1-2000 T 6- 325 8- 250	3-1000 8- 250 x	1559 (B-25C)
B-25D-NC (-1 thru -15) *	2) 2)	200 200 a	UPPER TURRET LOWER TURRET	8- 250 12- 100	8- 250 8- 100	5000	1684 (B-25D)
B-25C-NA (-25)	AS ABOVE EXCEPT NO LOWER TURRET			1-2000 2-1600 3-1000	1-2000 T 6- 325 8- 250	2-1600 8- 250 x	1524 (B-25C)
B-25D-NC (-20 thru -35)	ON 210(D-20), -25, -30 & -35.			6- 500 8- 250 12- 100	8- 250 8- 100	5200	1649 (B-25D)
B-25G-NA (-1 thru -10)	1-75MM 2-.50 2-.50 2-.50	21 400 200 200 o	NOSE CANNON ML 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 2-.50 2-.50 2-.50	21 400 400 d 200 200 500	NOSE CAN. T1361 NOSE... FIXED NOSE... PACKAGE UPPER TURRET SIDE WAIST-FL. TAIL... POWER MT.	1-2000 2-1600 3-1000 6- 500 8- 250 12- 100	1-2000 T	3200	1624
B-25J-NC (-1 thru -20)	4) 1) 2) .50 2) 2)	400 300 300 200 200 600	NOSE... PACKAGE NOSE... FLEX. NOSE... FIXED SIDE WAIST-FL. UPPER TURRET TAIL... POWER MT.	A S	A B O V E		AS ABOVE

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

CONFIDENTIAL

THIS PAGE IS UNCLASSIFIED

PAGE 13
AS OF:
DATE 27 APR 1944

TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART

CONFIDENTIAL

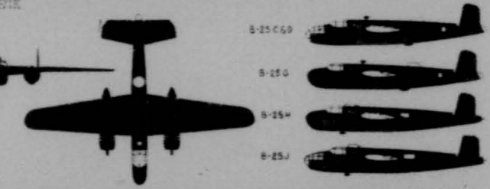
MODEL & BLOCK NO.	ENGINE & PROP.		SIZE		WT.	COMBAT CREW	FUEL		ARMAMENT			BOMBS-CARGO-PASS.		RADIO	REMARKS & REFERENCE
	ENGINE MFGR. MODEL	B.H.P./ALT.	S-SPAN	L-LENGTH			TANK TYPE OR LOCATION	NO. TANKS & CAPACITY U.S. GAL.	NO. GUNS & CALIBER	RDS PER GUN	LOCATION & TYPE	INTERNAL NO. & SIZE OR STATION	EXTERNAL NO. & SIZE OR CAPACITY		
B-25C & D (NA & NC)	WRIGHT R-2600-13 2 SPD. SUPERCH. HAMILTON STD. 12" DIA. - 3 BL. F.P., HYDRAMATIC	T 1700/ S L M 1700/ 4500 C 1500/ 6700 1350/ 13500	S 67'6" L 52' H 15'9" T 19'11" W 61'0" SQ.	B 20500 C 33500 R 33500 W 35000 B	5	MAIN - WINGS MAIN - WINGS BOMB BAY	2 x 184 2 x 151 1 x 555 1255 TOT.	1-.30 2-.50 2-.50	600 400 350	NOSE - FLEX. UPPER TURRET LOWER TURRET	1-2000 2-1000 6- 500 8- 250 12- 100	NONE	3000	SEE (A)	TECHNICAL ORDER 01-606B-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.	AS ABOVE	AS ABOVE	AS ABOVE	B 22000 C 33500 R 33500 W 35000 B	5	MAIN - WINGS MAIN - WINGS AUX. - WINGS SIDE WAIST BOMB BAY	2 x 184 2 x 151 6 - 304 1 x 125 1 x 555 1224 TOT.	1) 1) 2) 2) 2)	300 300 400 400 350	NOSE - FLEX. NOSE - FIXED UPPER TURRET LOWER TURRET (On some models)	1-2000 b 2-1600 3-1000 6- 500 8- 250 12- 100	(SEE C) 1-2000 T	2-1600 28- 250 5200	AS ABOVE	TECHNICAL ORDER SAME AS ABOVE a-B-25C-1 & D-1 ARMAMENT SAME AS B-25C & D. b-CARRIED ON LATER MODELS ONLY. F-FUEL CAPACITY OF LAST 102 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.	AS ABOVE	AS ABOVE	S 67'6" L 51' H 15'9" T 19'11" W 61'0" SQ.	B 21700 C 33500 R 33500 W 35000 B	4	MAIN - WINGS MAIN - WINGS AUX. - WINGS SIDE WAIST BOMB BAY	2 x 184 2 x 151 6 - 304 1 x 125 2 - 550 1224 TOT.	1-75MM 2) 2) 2)	21 400 400 350	NOSE CANNON-ML NOSE - FIXED UPPER TURRET LOWER TURRET (On some models)	A S	A B O V E	AS ABOVE	TECHNICAL ORDER 01-606C-1. (REV. 10 DEC. 1943) F-BOMB BAY FUEL CAPACITY CONSISTS OF 1-215 GAL. SELF SEALING REMOVABLE TANK & 1-335 GAL. METAL DROPPABLE TANK; 1-585 GAL. METAL TANK IS INTERCHANGEABLE.	
B-25H-NA -1 TO -10 INCL.	WRIGHT R-2600-13 or -29 2 SPD. SUPERCH. HAMILTON STD. 12" DIA. - 3 BL. F.P., HYDRAMATIC	AS ABOVE	AS ABOVE	B 22000 C 33500 R 33500 W 35000 B	5	MAIN - WINGS MAIN - WINGS AUX. - WINGS SIDE WAIST BOMB BAY	2 x 184 2 x 151 6 - 304 2 x 50 2 - 550 1224 TOT.	1-75MM 4) 4) 2) 2)	400 400 200 400 600	NOSE CANNON-FLEX NOSE - FIXED PORE - PACKAGE SIDE WAIST-FL. UPPER TURRET TAIL-POWER MT.	AS ABOVE	1-2000 T	3200	(SEE C) AS ABOVE	TECHNICAL ORDER 01-606D-1. (15 OCT. 1943) a-SOME B-25H-1's CARRY ONLY 2 NOSE PACKAGE GUNS. F-BOMB BAY FUEL NOTE SAME AS FOR B-25G SHOWN ABOVE.
B-25J-NC -1, -5	AS ABOVE	AS ABOVE	S 67'6" L 52' H 15'9" T 19'11" W 61'0" SQ.	B 21100 C 33500 R 33500 W 35000 B	6	AS ABOVE	AS ABOVE	1) 2) 4) 2) 2)	300 300 400 200 400 600	NOSE - FLEX. NOSE - FIXED PORE - PACKAGE SIDE WAIST-FL. UPPER TURRET TAIL-POWER MT.	A S	A B O V E	AS ABOVE	TECHNICAL ORDER 01-606E-1. (20 DEC. 1943)	

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 HIGH SPEED FT./MIN.	MAX. CONTIN. POWER RATE OF CLIMB FT./MIN.	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.						
		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
B-25C & D (NA & NC)	25000 30000 32000 34000	- 3800 4700 5500	3300 3650 3900 4400	99 108 112 116	1550 1800 2000	20000 15000 10000 5000 S L	267 286 284 283 265	- - 950 1150 1100	262 283 279 276 260	100 600 820 8	32.1 14.5 8.0 3.5 0.0	30000 29500	NONE 3000	1255 670	950 500	3.9 2.0	- -	1475 750	7.0 3.5	- -	1850 925	10.3 5.2	
B-25C-NA -1 TO -25 INCL. B-25D-NC -1 TO -35 INCL.	32000 33200 34000 34900 35200	4700 5200 5500 5900 6000	3900 4000 4100 4750 4850	112 111 116 116 116	3700 2000 2050 2100	20000 15000 10000 5000 S L	266 284 283 282 264	- - 950 1000	260 280 276 274 257	- - 650 650 650	21.3 11.6 5.0 0.0	34900 34000 33200 32000 35200	NONE NONE 974 2000 T 974	1624 1599 974 650 974	- - 700 650 600	2.9 2.9 2.9	- -	1050 950 875	5.9 4.6 4.5	- -	1500 1350 1125	8.4 6.2 5.9	* FOR SPECIAL FERRYING USE 1x125 GAL. SIDE WAIST FUEL TANK.
B-25G-NA -1 TO -10 INCL.	32000 33700 34000 34900 35200	4700 5350 5450 5800	3950 4050 4100 4700 4650	112 115 116 116 116	3700 2050 2100	20000 15000 10000 5000 S L	266 281 278 285 268	- - 950 1000	260 277 274 276 257	- - 650 650 650	21.3 11.6 5.0 0.0	34900 34000 33700 33900 35000	NONE NONE 1189 2000 T 974	1624 1524 950 925 700	- - 3.9 4.0 3.2	- -	- -	2200 2050 1550 1150 1250	10.3 9.6 7.3 7.2 5.8	- -	2150 2300 1725 1550 1375	12.9 12.0 8.9 8.6 7.2	* INCLUDES 1x215 GAL. SELF SEALING REMOVABLE TANK AVAILABLE WITH 2000 LB. BOMBS ONLY OR 1x2000# TORP. ** FOR SPECIAL FERRYING USE 1x125 GAL. SIDE WAIST FUEL TANK.
B-25H-NA -1 TO -10 INCL.	32000 33200 33700 34000 34900	4700 5150 5350 5450 5800	3950 4000 4050 4100 4650	112 111 115 116 116	3700 2000 2050 2100	20000 15000 10000 5000 S L	262 277 275 285 266	- - 950 1000	253 275 270 275 256	- - 650 650 650	21.3 11.6 5.0 0.0	34900 34000 33500 33900 34600	NONE NONE 1189 2000 T 974	1624 1524 900 850 725	5.1 4.8 3.7 3.7 3.0	- -	- -	2200 2050 1550 1150 1250	10.3 9.6 7.3 7.2 5.8	- -	2150 2300 1725 1550 1375	12.9 12.0 8.9 8.6 7.2	* INCLUDES 1x215 GAL. SELF SEALING REMOVABLE TANK AVAILABLE WITH 2000 LB. BOMBS ONLY OR 1x2000# TORP. ** STRIP TO 35000 LB. LIMITING WEIGHT; 1624 GAL. CONDITION INCLUDES 2x50 GAL. WAIST TANKS FOR SPECIAL FERRY.
B-25J-NC -1, -5	32000 33700 34000 34900 35200	4700 5350 5450 5800	3950 4050 4100 4650	112 115 116 116	3700 2050 2100	20000 15000 10000 5000 S L	266 281 278 285 268	- - 950 1000	260 277 274 276 257	- - 650 650 650	21.3 11.6 5.0 0.0	34900 34000 33500 33900 34600	NONE NONE 1189 2000 T 974	1624 1524 900 850 725	3.6 3.7 3.7 3.0	- -	- -	1575 1150 1275	7.3 7.2 6.0	- -	1800 1575 1150	9.1 9.0 7.6	* INCLUDES 1x215 GAL. SELF SEALING REMOVABLE TANK AVAILABLE WITH 2000 LB. BOMBS ONLY OR 1x2000# TORP. ** 1624 GAL. CONDITION INCLUDES 2x50 GAL. WAIST TANKS FOR SPECIAL FERRY.

- NOTES: (A) 24 VOLT RADIO SYSTEM
- SCR-211 FREQUENCY METER
 - SCR-269G RADIO COMPASS
 - SCR-274F 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 - 43B MARKER BEACON
 - RC - 103 BLIND LANDING (Provisions only)
 - RC - 196 CONTACTOR UNIT
 - RC - 36 INTERPHONE AMPLIFIER

WAS FIGURES ARE PRELIMINARY. SUBJECT TO REVISION AFTER FLIGHT CHECKS.
(B) MILITARY POWER AVAILABLE FOR 5 MINUTES ONLY.
(C) LIMITED TO 35000 LB. BY FLYING CHARACTERISTICS.
(D) TORPEDOES BEING USED IN LIMITED QUANTITIES ONLY.



B-25
"MITCHELL"

CONFIDENTIAL

THIS PAGE IS UNCLASSIFIED

CONFIDENTIAL

14

MARTIN (BALTIMORE) "MA"
(CHINA) "MC"

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-.50 1-.30 2-.50 2-.50	600 500 1500 400	NOSE...FLEX. TUNNEL...FLEX. TAIL...FLEX.MT. UPPER TURRET SIDE WAIST-FL.	2-2000 2-1600 4-1000 2-500 15-250 30-100	1-2000 (TORPEDO)	2-1500 1-2000T 5200	1162	
B-26B-MA (-10 thru -20) B-26C-MC -5 thru last 75(-30)	1) 1) 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 last 150 (-50) B-26C-MC last 100(-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)A-55 B-26C-MC -1, -2 & -6 B-26C-MC -45	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	AS ABOVE EXCEPT THAT B-26C-1, -2 & -6 HAVE THE TORPEDO DELETED.			AS ABOVE	
111(B-40)AT-23A 1st. 100(B-45) * 3(C-25) : AT-23B 71(C-30) : AT-23C (C-35&40)AT-23B 1st. 25(C-45) *	ALL GUNS & ARMAMENT ITEMS REMOVED FROM THESE MODELS: MODIFIED FOR TOT TARGET USE & DESIGNATED AT-23A & B.			N	O	N	E	1962 3(C-25) 1162 (Balance)

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

CONFIDENTIAL

THIS PAGE IS UNCLASSIFIED

TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART																
MODEL & BLOCK NO.	ENGINE & PROP.		SIZE		WT.	COMBAT CREW	FUEL		ARMAMENT			BOMBS-CARGO-PASS.		RADIO	REMARKS & REFERENCE	
	NUMBER	ENGINE MFGR. MODEL SUPERCHARGER PROP MFGR. TYPE	B.H.P./ALT. T-TAKE-OFF M-MILITARY C-CONTINUOUS	S-SPAN L-LENGTH H-HEIGHT T-TREAD W-WINGAREA	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
												NO. & SIZE STATION	NO. & SIZE CAPACITY			
B-26B-MA B-2, -3 & -4	2	PRATT-WHITESEY R-2800-5e 2 SPD. SUPERCH. CURTISS 13 1/2" DIA. - LBL. F.P. ELECTRIC	T 1850/ 2700 M 1500/14000 C 1500/ 7800 1450/13000	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 B. BAY - (PORE)	2 x 360 2 x 121 2 x 250 1162 TOT	1-.30 1-.30 2-.50 2-.50	600 600 1500 1400	NOSE - FLEX. TUNNEL - FLEX. TAIL-FLEX.MT. UPPER TURRET SIDE WAIST-FL.	2-2000 2-1500 1-1000 8- 500 15- 250 30- 100	1-2000 (TORPEDO)	2-1600 1-2000T	SEE (A) SEE (B) (B)	FOR DETAILED ARMAMENT AND BOMB INSTALLATIONS SEE PAGE OPPOSITE. TECHNICAL ORDER 01-352A-1. (5 MARCH 1943) a SIDE WAIST GUNS ADDED TO LAST 1/1 (-L) ONLY. b B-26B-MA HAS -5 ENGINE; B-26B-2-MA HAS -1L ENGINE & B-26B-3 & -4 HAS -1L ENGINE.
B-26B-MA -10 TO -20 INCL B-26C-MQ -5 TO -25 INCL	2	PRATT-WHITESEY R-2800-13 2 SPD. SUPERCH. CURTISS 13 1/2" DIA. - LBL. F.P. ELECTRIC	T 1920/ 3200 M 1490/14300 C 1550/ 7100 1360/14600	S 71'0" L 58'3" H 21'6" T 22'0" W 659 SQ. FT.	B 25300 C 37000 R 37500 W 36200(C)	6	MAIN - WINGS AUX. - WINGS BOMB BAY - (PORE & REAR)	2 x 360 2 x 121 4 x 250 1962 TOT	1) 2) 2) 2)	270 240 250 200	NOSE - FLEX. NOSE - FLEX. SIDE WAIST-FL. U. FUS. - PACKAGE L. FUS. - PACKAGE UPPER TURRET TAIL-POWER MT.	2-2000 2-1500 1-1000 6- 500 10- 250 20- 100	A B A B O T E	AS ABOVE	TECHNICAL ORDER 01-352B-1. (25 DEC. 1943) a-B-26B-10, -15 & C-5 HAVE FLEX. TAIL MOUNT INSTEAD OF POWER MOUNT. & RES./GUN SAME AS B-26B-2-MA. b-BASIC WEIGHT OF B-26B-15 IS 21,600 LB.	
B-26B-MA -25 TO -55 INCL B-26C-MQ -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	270 240 250 200	NOSE - FLEX. NOSE - FLEX. SIDE WAIST-FL. U. FUS. - PACKAGE L. FUS. - PACKAGE UPPER TURRET TAIL-POWER MT.	2-2000 2-1500 1-1000 6- 500 10- 250 20- 100	SEE (B) (B)	NOTE (A) plus RC-103 & SCR-522	REFERENCE AS ABOVE a-FLEXIBLE NOSE GUN DELETED ON LATEST B-26B's and B-26C-15. b-ALL MODELS EXCEPT 1st. 75(B-26C-30) CARRY LESS BOMBS DUE TO DELETION OF 2 REAR BOMB BAYS. c RC-103 & SCR-522 ADDED TO LATER MODELS ONLY.	
B-26F-MA -1, -2 & -6 B-26G-MA -1 (SEE M)	2	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	6	MAIN - WINGS AUX. - WINGS BOMB BAY - (PORE ONLY)	2 x 380 2 x 120 2 x 250 1500 TOT	1) 2) 2) 2)	270 240 250 200	NOSE - FLEX. SIDE WAIST-FL. U. FUS. - PACKAGE L. FUS. - PACKAGE UPPER TURRET TAIL-POWER MT.	2-2000 2-1500 1-1000 6- 500 10- 250 20- 100	AS ABOVE	TECHNICAL ORDER 01-352C-1. (15 FEB. 1944) a-B-26G DESIGNATION IS USED FOR AIRPLANES WITH AN FITTINGS; NO OTHER MAJOR CHANGES.		

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		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.	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.		RANGE	ENDUR.
B-26B-MA B-2, -3 & -4	24000	-	2300	110	-	1600	20000	270	300	265	200	25.5	34000	NONE	1162	950	3.5	-	-	-	-	-	-	2000	11.0
B-26B-MA -10 TO -20 INCL B-26C-MQ -5 TO -25 INCL	28000 32000 35000 36000	- 3250 4000 4300	1950 2900 3500 -	134 120 130 -	- 2350 2950 3150	900 2100 2600 -	20000 15000 10000 5000	- 298 291 294	- 750 1000 1450	- 294 292 283	- 600 900 9	25.6 14.0 7.7 3.4	38200 37800 38200 36300 38100	NONE NONE 1500 2000T 4000	1162 1000 1162 962 962	1000 900 1000 962 650	4.2 4.2 4.2 2.7 2.7	- - - - -	- - - - -	2375 1725 1700 -	11.7 8.5 8.5 -	- - - -	- - - -	2500 1825 1800 -	14.7 10.2 10.2 6.0
B-26B-MA -25 TO -55 INCL B-26C-MQ -30 & -45 INCL	28000 32000 35000 36000	- 3050 3900 4400	1950 2800 3500 -	134 135 136 -	- 2000 2600 2850	900 1200 1300 -	20000 15000 10000 5000	- 282 278 285	- - - 1000	- 273 271 269	- 330 550 9	25.6 11.8 11.1 0.0	37800 34100 36300 38100	NONE NONE 2000T 4000	1162 962 962 962	1000 650 962 650	4.2 2.6 - 2.7	- - - -	- - - -	1725 1125 -	8.5 5.4 -	- - -	- - -	1825 1250 -	10.2 7.0 6.0
B-26F-MA -1, -2 & -6 B-26G-MA -1 (SEE M)	25000 32000 35000 36000	2350 3100 3850 4200	2200 2400 2600 2650	135 135 136 137	1050 2050 2550 2750	1050 1200 1300 1350	25000 20000 15000 10000 5000	- - 280 273	- - - 1120	- - 271 267	- - 390 560	25.6 11.2 4.0 0.0	38000 36200 34200 38200	NONE NONE 1500 4000	1050 1850 1000 1000	1050 875 675 675	4.3 3.6 2.7 2.8	- - - -	- - - -	1775 1500 1175 1100	8.8 7.2 5.6 5.6	- - -	- - -	1875 1600 1300 1125	10.6 9.0 7.3 6.3

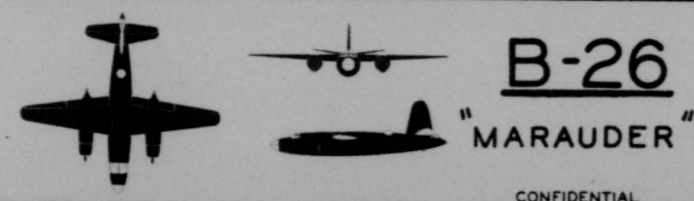
NOTES: (A) 24 VOLT RADIO SYSTEM

SCR-211 FREQUENCY METER
SCR-2592 RADIO COMPASS
SCR-271a COMMAND SET
SCR-287a LIAISON SET
SCR-335 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

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 38200 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 REDESIGNATED AT-23A & B.

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



B-26
"MARAUDER"

CONFIDENTIAL

THIS PAGE IS UNCLASSIFIED

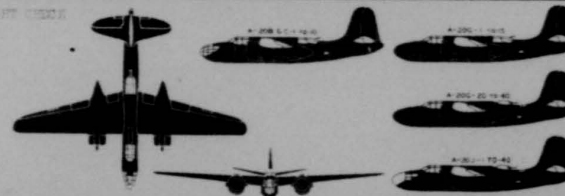
PAGE 17
AS OF
DATE 27 APR, 1944

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			EXTERNAL	MAX. LOAD LB.	TYPE
													NO. & SIZE			NO. & SIZE		
A-20B-DL	2	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 200 200	TUNNEL - FLEX. L. & R. WING REAR COCKPIT NOSE - FIXED	1-1000 1-500 1-250 10-100	(SEE C) 1-2000 T 2-500 1-250 1-100	1000	SCR-27LN SCR-535 MC - 26C RC - 51	TECHNICAL ORDER 01-1040-1. (1 DEC. 1942) * SOME MODELS ONLY.		
A-20C-DO	2	AS ABOVE EXCEPT FOR CHANGE TO R-2600-23 ENGINE	T 1600/3000 M 1600/1000 C 1350/5000 1275/11500	S 61'4" L 47'4" 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 1 - 580 1080 TOT.	1) 2) .30 4) a	500 ea	TUNNEL - FLEX. REAR COCKPIT NOSE - FIXED	1-500 1-250 1-100	(SEE C) 1-2000 T	2000	AS ABOVE	TECHNICAL ORDER 01-1040-1. (10 FEB. 1942) b NO TORPEDO PROVISIONS ON A-20C-1. * FOR ALTERNATE INSTALLATIONS SEE EE-506-A.		
A-20G-DO	2	AS ABOVE	AS ABOVE	AS ABOVE	B 17200 C 24000 R 25200 W 27000A	3	AS ABOVE	AS ABOVE	1) .30 1 - .50 6 - .50	500	TUNNEL - FLEX. REAR COCKPIT NOSE - FIXED	1-500 1-250 1-100	(SEE C) 1-2000 T	2000	SCR-27LN SCR-535A SCR-695A MC - 26Y RC - 36 RC-32 or 198	TECHNICAL ORDER 01-1040 (5 APRIL 1944) * 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	2	AS ABOVE	AS ABOVE	AS ABOVE	B 17700 C 26000 R 26000 W 27000A	3	AS ABOVE	INBD. WINGS OUTBD. WINGS FUS. (BOMB BAY) BOMB BAY (SEE B)	2 x 136 2 x 64 3 - 325 1 x 374 1099 TOT.	1) 2) .50 6)	400 400 350	TUNNEL - FLEX. UPPER TURRET NOSE - FIXED	1-500 1-500 1-250 1-100	(SEE C) * 1-2000 T 1-500 1-250 1-100	4000	SCR-27LN SCR-535 SCR-695A MC - 26Y RC - 36 RC - 198	REFERENCE AS ABOVE * NO PROVISIONS FOR TORPEDO ON A-20G-10.	
A-20J-DO	2	AS ABOVE	AS ABOVE	AS ABOVE	B 17800 C 26000 R 26000 W 27000A	4	AS ABOVE	AS ABOVE	1) 2) .50	400 400 350	TUNNEL - FLEX. UPPER TURRET NOSE - FIXED	AS ABOVE	AS ABOVE	AS ABOVE	SCR-27LN SCR-695A MC - 26C RC - 36 RC - 198 SCR-535	REFERENCE AS ABOVE * NO PROVISIONS FOR TORPEDO ON A-20J-15.		

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 DIST.		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.	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			RANGE MILES	ENDUR. HOURS	RANGE MILES	ENDUR. HOURS				RANGE MILES	ENDUR. HOURS	RANGE MILES	ENDUR. HOURS										
A-20B-DL	17000 19000 22000 24000 27000	- 2800 4000 4850 6500	2150 2700 3000 3600 4700	88 95 105 105 105	1500 2050 3000 3600 4700	25000 20000 15000 10000 5000	2500 2000 1500 1000 500	275 303 315 319 323	370 400 425 430 435	277 300 312 313 313	290 375 425 470 500	22.6 13.2 8.3 6.4 5.0	23800 21000	NONE 1000	1080 490	850 300	3.3 1.4	1150 500	4.9 2.1	1500 600	7.0 2.7	- -	- -	2100 900	13.4 6.0				
A-20C-DO	18000 20000 23000 25000 27000	- 3200 4400 5700 6500	2550 2800 3150 3500 4700	91 98 109 109 109	1600 2350 3000 3600 4700	25000 20000 15000 10000 5000	2500 2000 1500 1000 500	275 302 317 319 323	370 400 425 430 435	277 300 312 313 313	290 375 425 470 500	22.6 13.2 8.3 6.4 5.0	21500 23200	NONE 2000	1080 540	775 300	3.3 1.5	- -	- -	1900 675	6.6 3.1	- -	- -	2500 1000	12.0 6.5				
A-20G-DO	19000 21000 24000 26000 27000	- 3600 4850 5900 6500	2700 2900 3250 3600 4700	95 102 113 113 113	1650 2650 3000 3600 4700	25000 20000 15000 10000 5000	2500 2000 1500 1000 500	275 302 317 319 323	370 400 425 430 435	277 300 312 313 313	290 375 425 470 500	22.6 13.2 8.3 6.4 5.0	25300 24000 24000	NONE 2000 2000 T	1080 540 540	975 450 425	3.5 1.7 1.7	1650 750 650	6.8 3.1 3.0	1700 800 700	7.3 3.1 3.3	2000 900 -	9.1 4.1 -	2300 1100 950	12.4 6.0 5.7				
A-20G-DO	-	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	25000 20000 15000 10000 5000	2500 2000 1500 1000 500	275 302 317 319 323	370 400 425 430 435	277 300 312 313 313	290 375 425 470 500	22.6 13.2 8.3 6.4 5.0	26200 26000 26000 26000	NONE 2000 2000 T 400	1099 755 755 400	900 625 575 300	3.5 2.3 2.3 1.2	- *950 *925 *425	- *4.3 *4.3 *3.0	1585 1075 975 585	7.3 4.5 4.5 2.3	- *1200 *550 -	- *4.7 *3.5 -	2000 1300 1175 650	11.2 6.6 6.7 3.3	* FLIGHTS ABOVE 10000 FT. REQUIRE SPECIAL PROVISIONS FOR OXYGEN.			
A-20J-DO	-	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	25000 20000 15000 10000 5000	2500 2000 1500 1000 500	275 302 317 319 323	370 400 425 430 435	277 300 312 313 313	290 375 425 470 500	22.6 13.2 8.3 6.4 5.0	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 TANKS 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 FIELD INACT; SUBJECT TO REVISION AFTER FLIGHT TEST.
* 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) "DL"

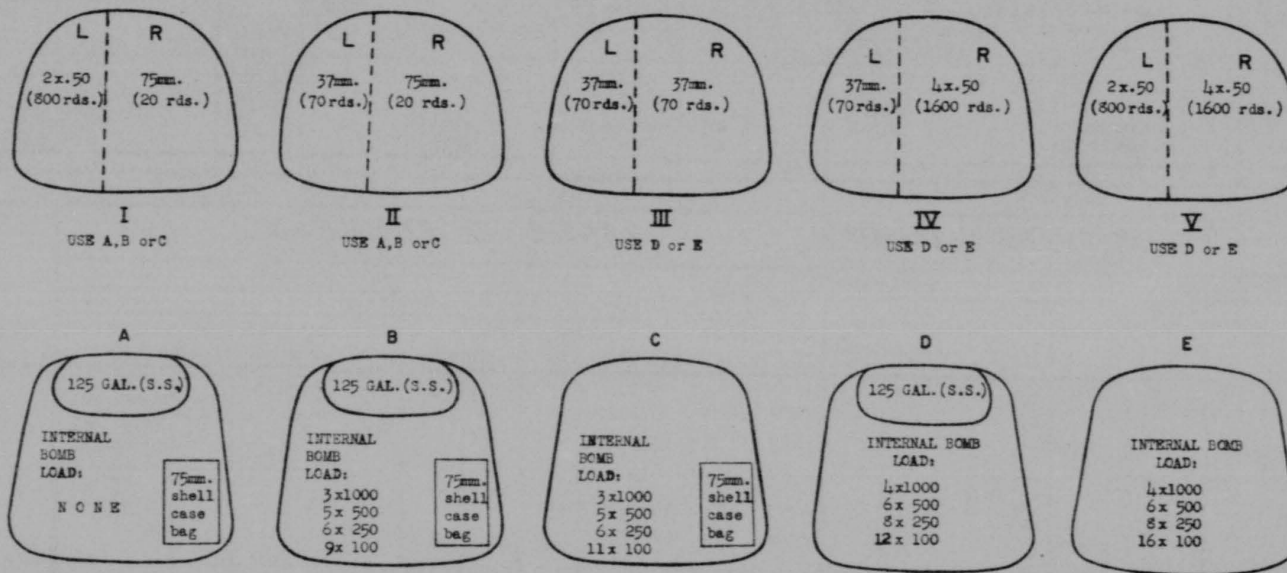
CONFIDENTIAL

THIS PAGE IS UNCLASSIFIED

CONFIDENTIAL

18

ALL PURPOSE NOSE
(VIEWED FROM REAR)



S.S. - SELF SEALING

BOMB BAY
(VIEWED FROM REAR)

A-26B

CONFIDENTIAL

THIS PAGE IS UNCLASSIFIED

TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART																
MODEL & BLOCK NO.	ENGINE & PROP.		SIZE		WT.		FUEL		ARMAMENT			BOMBS-CARGO-PASS.		RADIO	REMARKS & REFERENCE	
	NUMBER	ENGINE MFGR. MODEL	B.H.P./ALT.	S-SPAN	B-BASIC	COMBAT CREW	TANK TYPE OR LOCATION	NO. TANKS & CAPACITY U.S. GAL.	NO. GUNS & CALIBER	RDS. PER GUN	LOCATION & TYPE	INTERNAL	EXTERNAL	MAX. LOAD LB.		TYPE
		SUPERCHARGER PROP MFGR. TYPE	T-TAKE-OFF M-MILITARY C-CONTINUOUS	L-LENGTH H-HEIGHT T-TREAD W-WING AREA	R-RECD LIM W-WAR MAX							NO. & SIZE OR STATION	NO. & SIZE OR CAPACITY			
A-26B (DL) DT -1 & -5	2	PRATT-WHITNEY R-2800-27 SINGLE ST.-26PD. HAMILTON STD. 12"7" DIA.-3BL. F.F., HYDROMATIC	T 2000/1500 M 1600/13500 C 1600/6500 1150/11000	S 70' L 50'6" H 18'6" T 19'6" W 540 SQ. FT.	B 21100 C 35000 R 35000 W 37000	2	MAIN - WINGS AUX. - WINGS BOMB BAY (SS) B. BAY (FERRY)	2 x 300 2 x 100 1 x 125 1 x 675 1500 TOT.	1-75MM 2-.50 2-.50 8-.50 (ALTERNATE INSTALLATION - SEE A)	20 500 500 300	NOSE CAN, T13E1 UPPER TURRET LOWER TURRET WINGS-PACKAGE	b 4-1000 b 6- 500 b 8- 250 b 16- 100	b 2-2000T b 4- 500 b 4- 250 b 4- 100	4-1000 4- 500x 4- 250 b 6000	SCR-271M SCR-995 MN-26C RC-36	TECHNICAL ORDER 01-104J-1. (10 NOV. 1943) a PARTS WILL BE PROCURED FOR SERVICE INSTALLATION OF ALL-PURPOSE NOSE AS SHOWN ON PAGE OPPOSITE. b SEE PAGE OPPOSITE FOR BOMB LOAD CARRIED WITH 75MM GUN. c NORMAL CREW (2); CREW (3) WITH 75MM. CANNON. f NO SELF SEALING BOMB BAY TANK ON A-26B-1-DL ONLY.
A-26B (DL) DT -10 & -15	2	AS ABOVE	AS ABOVE	AS ABOVE	B 23600 C 35000 R 35000 W 37000	2	AS ABOVE	6-.50 2-.50 2-.50 8-.50 (ALTERNATE INSTALLATION - SEE A)	400 500 500 300	NOSE UPPER TURRET LOWER TURRET WINGS-PACKAGE		AS ABOVE	AS ABOVE	AS ABOVE	TECHNICAL ORDER 01-104J-1. (10 NOV. 1943) a SEE PAGE OPPOSITE FOR ALL-PURPOSE NOSE INSTALLATIONS.	

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 AT 10000 FT.		MAX. CRUISE POWER AT 10000 FT.		LONG RANGE AT 10000 FT.							
		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.
A-26B (DL) DT -1 & -5	25000	-	2950	96	-	1750	20000	329	250	326	100	31.4	35000	NONE	1600	-	-	-	-	-	-	3110	16.1	* STRIPPED TO 35000 LB. FOR FERRYING. NOTE: WHEN 8 EXTERNAL WING PACKAGE GUNS ARE CARRIED HIGH SPEED WILL BE DECREASED APPROX. 13 MPH. AND RATE OF CLIMB 150 FT./MIN.		
	29000	2900	2950	104	2100	2000	15000	341	720	333	520	15.3	31000	NONE	925	770	2.5	1160	4.2	1560	6.7	-	-		1850	9.5
	32000	3700	3200	109	2550	2150	10000	337	1010	327	560	7.0	34000	3000	925	750	2.5	1030	4.0	1500	6.9	-	-		1650	8.3
	33000	4000	3250	111	2700	2250	5000	345	1510	319	4	2.7	34000	4000	800	640	2.2	850	3.4	1270	5.9	-	-	1360	6.9	
	34000	4300	-	-	2850	-	S L	305	2030	299	4	0.0	32500	(8) WING GUNS	925	660	2.3	-	-	1280	5.0	-	-	1500	8.0	
A-26B (DL) DT -10 & -15	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: (A) 8 REMOVABLE .50 CAL. PACKAGE GUNS MAY BE MOUNTED ON WING BOMB RACKS IN PLACE OF BOMBS.

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

T-TORPEDO
X-EXTERNAL



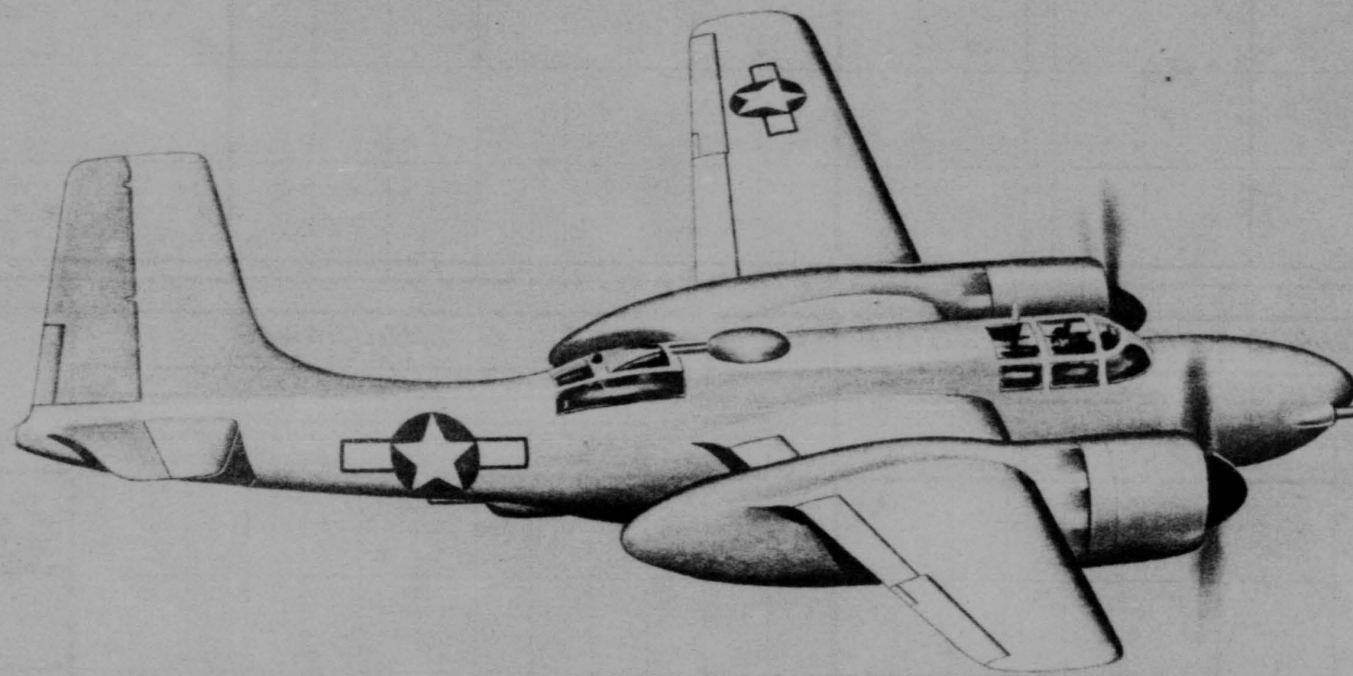
A-26
"INVADER"

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

CONFIDENTIAL

THIS PAGE IS UNCLASSIFIED

CONFIDENTIAL



DOUGLAS A-26B

CONFIDENTIAL

THIS PAGE IS UNCLASSIFIED

PAGE 21
DATE 20 MAR 1964

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 OR STATION	EXTERNAL NO. & SIZE OR CAPACITY	MAX. LOAD LB.		TYPE	
A-36A-NA	1	ALLISON V-1710-27 SINGLE SPEED CURTISS 10"9" DIA.-3BL. COMBT. SP. BLDET.	T 1325/3 L M 1325/5100 ** 1500/2500 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 50 150 TOT.	2-.50 1-.50	200 200	NOSE - FIXED WING - FIXED	NONE	2-500 2-250	1000	SCR-271 SCR-535 or SCR-995** * WAR EMERGENCY RATING. ** LAST 399 ONLY.	TECHNICAL ORDER 01-60HB-1. (10 JULY 1943)	
			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	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.	RANGE	ENDUR.
A-36A-NA	9000	2800	3000	-	2050	2100	20000	288	500	277	300	16.6	11000	NONE	150	1100	5.6	-	-	-	-	-	-	2100	10.4	* WITH 2-500 LB. EXTERNAL BOMBS.
	10000	3400	3500	-	2600	2400	15000	295	1025	285	9.1	10000	NONE	350	1000	3.8	-	-	-	-	-	-	-	1500	7.7	
	11000	4100	-	-	3200	-	10000	305	1525	293	5.1	9000	NONE	180	550	2.0	-	-	-	-	-	-	-	850	3.9	
							5000	310	2075	293	2.4	10000	1000	150	500	2.0	-	-	-	-	-	-	-	800	3.7	

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"

CONFIDENTIAL

THIS PAGE IS UNCLASSIFIED

PAGE 22
AS OF
DATE 21 APRIL 1944

TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART

CONFIDENTIAL

MODEL & BLOCK NO.	ENGINE & PROP.		SIZE		WT.	COMBAT CREW	FUEL		ARMAMENT			BOMBS-CARGO-PASS.		RADIO	REMARKS & REFERENCE	
	ENGINE MFGR. MODEL SUPERCHARGER PROP MFGR. 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.
C-46A-CU -1 TO -45 INCL. C-46A-CK -1 & 5	PRATT-WHITE R-2800-51 2 SPEED CURTISS 13'6" DIA. - 13BL. P.P. HYDROMATIC	T 2000/1500 M 1600/13500 C 1600/5700 1150/13000	S 108'0" L 76'4" H 22'0" T 26'0" W 1360 SQ. FT.	B 32100 C 46000 R 46000 W 56000A	3	WING-PANELS FUSELAGE	6-1100 8x100 2200 TOT.	N	0	N	E	FORE-BELLY 1800 AFT-BELLY 10000 or MAIN-CABIN 50 TROOPS	3700 15000	SCR-211, 269, 271, 287, 518, 578 & 695 RC-36, 43, 103 & 198 AN-ARR-1	TECHNICAL ORDER 01-251A-1. (20 NOV. 1943) EARLY MODELS HAVE HAMILTON STD., 3 BLADE, HYDROMATIC, 15'1" DIA. PROPELLER. MISC. RADIO CARRIED; MAX. COMBINATION SHOWN. NOTE: EARLY MODELS LIMITED TO 40000 LB. GROSS WEIGHT & HAVE SMALL CARGO DOOR.	
C-47A TO -90-DL C-47A TO -25-DK C-53 C&D-DL	PRATT-WHITE R-1850-92 INTEGRAL SUPER. HAMILTON STD. 11'7" DIA. - 3BL. P.P. HYDROMATIC	T 1200/5000 M - C 1050/7000	S 95'0" L 64'6" H 17'0" T 18'6" W 987 SQ. FT.	B 18000 C 26000 R 29000 W 36500A	3	MAIN-WINGS AUX. - WINGS FUSELAGE	2 x 202 2 x 200 8 x 100 1604 TOT.	N	0	N	E	CARGO or TROOPS or LETTERS	6000 27 18 11000 MAX	SCR-211, 269, 271, 287, 518, 522, 578, 595, 695 RC-36, 43, 103 & 198 AN-ARR-1	TECHNICAL ORDER 01-140C-1. (REV. 15 DEC. 1943) MISC. RADIO CARRIED; MAX. COMBINATION SHOWN. (AS APN-2 ON SOME MODELS). C-47, C-53 & C-53C INSTALLED WITH 12 VOLT RADIO SYSTEM; OTHERS WITH 24 VOLT RADIO SYSTEM. NOTE: C-47 & C-53 SERIES SIMILAR EXCEPT FOR LARGE CARGO DOOR ON C-47. THE C-53 CARRIES 28 PERSONNEL.	
C-60A-LO ATO-5	WRIGHT R-1820-67 2 SPEED HAMILTON STD. 10'6" DIA. - 3BL. P.P. HYDROMATIC	T 1200/5000 M 1200/5700 C 1000/2400 900/16500	S 65'8" L 49'10" H 12'0" T 15'4" W 551 SQ. FT.	B 13000 C 21500 R 21500 W 25000	3	FRONT-WINGS REAR - WINGS AUX. - CABIN	2 x 150 2 x 172 3 x 134 1046 TOT.	N	0	N	E	BELLY CABIN or PARATROOPS	3400 6600 or 15 8500	SCR-211, 269, 271, 287, 518, 595, 695 RC-36, 43, 103, 198	TECHNICAL ORDER 01-75CE-1. (10 MARCH 1943) MISC. RADIO CARRIED; MAX. COMBINATION SHOWN. EARLY MODELS CARRY SCR-555 IN PLACE OF SCR-695. 1200 LB. BALLAST REQUIRED IN NOSE TO BALANCE PARATROOPS.	

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 M.P.H.	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 M.P.H.	RATE OF CLIMB FT./MIN.	HIGH SPEED M.P.H.	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
		C-46A-CU -1 TO -45 INCL. C-46A-CK -1 & 5	31000 39000 46000 50000		- 2700 4050 6300	1800 2000 2250 -			55 70 75 -	1150 1300 1500 -	16000 15000 10000 5000 S L	20000 15000 10000 5000 S L				257 264 264 262 245	530 780 900 1100 1300	297 261 296 295 240	1400 650 750 900 900	28.4 18.6 11.6 5.5 0.0		51000 47000 47000 51000	2000 4000 6000 10000	2200 1100 1050 1050	1100 850 630 620
C-47-DL C-47A TO -90-DL C-47A TO -25-DK C-53 C&D-DL	21000 23000 26000 29000	- 1850 2100 3200	2100 2300 2600 -	56 58 73 -	1300 1400 1600 -	20000 15000 10000 5000 S L	20000 15000 10000 5000 S L	NO MILITARY POWER RATINGS	201 217 217* 202* 187*	180 150 720 920 -	37.0 20.0 11.0 5.0 0.0	29000 26000 29000	NONE 2000 6000**	1604 1000 804	1500 950 750	7.6 4.7 3.7	AS ABOVE TICAL CRUISE- ING CEILING	2300 1150 1100	13.0 7.9 6.2	AS ABOVE TICAL CRUISE- ING CEILING	3100 2050 1550	19.5 12.7 10.0			
C-60A-LO ATO-5	11000 17500 18500 21500 23000	- 1800 2050 2850 3300	2150 2600 2700 -	61 68 70 -	1700 2100 2200 -	20000 15000 10000 5000 S L	20000 15000 10000 5000 S L	259 260 260 255* 238*	650 1300 1400 1600 1600	255 262 255 247 235	500 1000 1200 -	19.0 11.0 7.0 3.0 0.0	21500 23000	1150 5000**	1046 604	1000 600	4.5 2.7	AS ABOVE	1150 850	7.0 4.3	AS ABOVE	2300 1200	14.4 7.7		

NOTES:

(A) PERMISSIBLE ONLY WITH ALL WING TANKS FULL.

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



MANUFACTURED BY CURTISS (Buffalo) "CU"; DOUGLAS (Long Beach) "DL" & DOUGLAS (Oklahoma) "DK"; LOCKHEED (Burbank) "LO"

CONFIDENTIAL

THIS PAGE IS UNCLASSIFIED

TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART


PAGE 23
DATE 27 APRIL 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 NO. SIZE OR STATION	EXTERNAL NO. SIZE OR CAPACITY		
C-54A-DO -1 & -5 C-54A-DC -1 TO -15 INCL.	PRATT-WHITEY R-2000-3 or -7 2 SPEED HAMILTON STD. 13'1" DIA. - 3 BL. P.F., HYDROMATIC	T 1290/8 L M 1290/3000 C 1015/3000 940/13200	S 117' 6" L 93'10" H 27' 6" T 24' 8" W 11650 SQ. FT.	B 37000 C 58000 R 58600 W 76000A	6	INRD. - WINGS OUTRD. - WINGS FUSelage	2x 508 2x 135 4x 164 3742 TOT.	N	0	N E	FORE-BELLY APT -BELLY FORE-CARGO APT -CARGO TROOPS	1800 2100 24000 11900 30 or 50	25000	SCR-211, 269, 271A, 287, 278, 595/695, RC-36, 43, 103, 128.	TECHNICAL ORDER 01-4086-1. (REV. 10 AUG. 1943) * MISC. RADIO CARRIED; MAX. COMBINATION SHOWN. NOTE: 30 TROOPS WITH FUSelage TANKS (3742 GAL.) 50 TROOPS WITHOUT FUSelage TANKS (1886 GAL.)
C-69-LO	R-3350-35 SINGLE or 2 SPEED HAMILTON STD. 15'6" DIA. - 3 BL. P.F., HYDROMATIC	T 2200/8 L M 2200/7300 C 2000/7800	S 123'0" L 95'2" H 23'8" T 28'0" W 1650 SQ. FT.	B 50500 C - R 75600 W 92000	9	WINGS WINGS	2x 819 2x 1589 4816 TOT.	N	0	N E	50 PASS- ENGERS	NONE	32000	SCR-271A, (2) 269, 287, 211, & 695, RC-43/193, 36 & 103.	TECHNICAL ORDER 01-750J-1. (10 NOV. 1943) * FIRST FIVE AIRPLANES EQUIPPED WITH SINGLE SPEED BLOWER.
C-87-CF	PRATT-WHITEY R-1530-13 TURBO HAMILTON STD. 11'7" DIA. - 3 BL. P.F., HYDROMATIC	T 1200/8 L M 1200/26500 C 1100/27000	S 110'0" L 66'4" H 18'0" T 25'8" W 1018 SQ. FT.	B 34250 C 56000 R 56000 W 62000	5	INRD.-WINGS OUTRD.-WINGS	12- 2364 6- 150 2814 TOT.	1-.50	500	TAIL - FLEX. (ON SOME MODELS ONLY)	CHAIRS OR LITTERS & BENCH	20 or 7 & 11	4400 WOB 10000 MAX.	SCR-271A, 269, 287, 578 & 695, RC-36, RC-43	TECHNICAL ORDER 01-52A-1. (15 DEC. 1943)


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.	SCRAMBLE 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 25000 FT.		RANGE MILES	ENDUR. HOURS	RANGE MILES
C-54A-DO -1 & -5 C-54A-DC -1 TO -15 INCL.	15000 55000 59000 62500 65000	2800 3300 3850 4350	2900 3400 -	80 90	1800 2200	56000	20000 15000 10000 5000 8 L	- - - 272 260	- - - 1150 1150	- - - 265 265	125 800 1000 1100 1050	24.4 16.0 9.4 4.4 0.0	62500 65000 59000 65000	NONE * 8000 * 8000 * 11000	3742 2814 1886	BACKLOG SPEED LIMITS	ABOVE PRAC- TICAL CRUIS- ING CEILING	3400 2500 1600 1550	16.2 12.0 7.7 7.7	AS ABOVE	4100 2900 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-69-LO	58500 62000 67000 75000 82000	2050 2500 3100 3750	3150 3400	100 105 110	1200 1450 1550	72000	20000 15000 10000 5000 8 L	- - - 330 314	- - - 2260 2450	- - - 325 307	640 1150 1680 2160 2300	11.0 9.0 5.0 2.0 0.0	82000 75600 82000	NONE 12000 18400	1400 1630 1630	- - -	- - -	2800 875 850	11.3 3.4 3.4	- - -	4650 1250 1200	23.8 6.9 6.4				
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	302 317 301 287 273 259	600 1050 1100 1150 1200 1200	295 850 895 882 859 855	600 850 900 950 1000 1000	34.0 26.8 20.9 15.3 9.0 4.2	52900 56000 56000 60000	NONE 3100 5800 9800	2814 2814 2364 2364	1215 1205 1000 975	4.6 4.6 3.8 3.7	1385 1375 1135 1100	4.6 4.6 3.8 3.8	2635 2550 2100 1975	11.7 11.4 9.4 8.9	2835 2750 2235 2165	11.0 10.8 8.9 8.8	3000 2850 2350 2300	16.2 15.5 12.5 11.7	

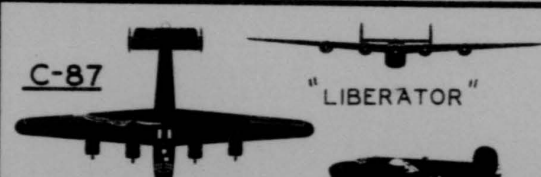
NOTES:
(A) PERMISSIBLE ONLY WITH ALL WING TANKS FULL.
RED FIGURES ARE PRELIMINARY; SUBJECT TO REVISION AFTER FLIGHT CHECK.



C-54A "SKYMASTER"



C-69 "CONSTELLATION"



C-87 "LIBERATOR"

MANUFACTURED BY DOUGLAS (SANTA MONICA) "DO" & (CHICAGO) "DC"; CONSOLIDATED (FT. WORTH) "CF" & LOCKHEED (BURBANK) "LO"

CONFIDENTIAL

THIS PAGE IS UNCLASSIFIED

TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART																	PAGE 24
CONFIDENTIAL																	AS OF:
																	DATE 27 APR 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 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-L9 & -53 TURBO CURTISS 11'6" DIA. - 3BL. P.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	1	MAIN-WINGS RES.-WINGS 2 x 90 2 x 60 300 TOT.	1-20MM. 4-.50	150 500 (MAX.)	HOSE-TYPE M1 HOSE-FIXED	NONE	NONE	SCR-183 or SCR-27LN	TECHNICAL ORDER 01-75FP-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	1	MAIN-WINGS RES.-WINGS DRCP.-EXTER. 2 x 90 2 x 60 2 x 75 2 x 150 300 TOT.	AS ABOVE	AS ABOVE	AS ABOVE	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. P.F. ELECTRIC	T 1225/8 L M 1150/27000 C 1100/21000	AS ABOVE	B 13500 C 15900 R 20000	1	AS ABOVE EXCEPT THAT LAST 200 P-38G-10'S ARE SAME AS BELOW	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE EXCEPT LAST 200 P-38G-10'S ONLY ARE SAME AS BELOW	2-1000 2-500 2-325 2-250 2-100	SCR-27LN* SCR-515** SCR-522 SCR-535 SCR-695***	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. P.F. ELECTRIC	T 1425/8 L M 1425/25000 C 1100/25000	AS ABOVE	B 13700 C 16300 R 21000	1	MAIN-WINGS RES.-WINGS DRCP.-EXTER. 2 x 90 2 x 60 2 x 75 2 x 150 2 x 300 300 TOT.	1-20MM. 4-.50	150 500 (MAX.)	HOSE-AN-M2" HOSE - FIXED	NONE	2-1000 2-500 2-325 2-250 2-100	SCR-27LN* SCR-515** SCR-522 SCR-695	TECHNICAL ORDER 01-75FP-1. (25 SEPT. 1943)	* LIMITED TO 1210 HP. BECAUSE OF INADEQUATE COOLING. * PROVISIONS ONLY. ** SPACE ONLY.		

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-PASS.	TOTAL FUEL U.S. GAL.	MAX. CONTINUOUS POWER				LONG RANGE								
	GROSS WEIGHT	T.O. DIST.		LAND. DIST.	T.O. DIST.		LAND. DIST.	WEIGHT	HT. 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.	
P-38F-LO	13500	-	2750	85	-	1150	15000	300	2100	360	#	11.0	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	-	2750	85	-	1150	15000	305	2100	360	#	12.0	19900	NONE	900	1375	5.0	1450	5.0	2050	9.3	2050	8.6	2300	9.0	
P-38G-LO -1 TO -15 INCL.	15000	2150	2980	90	1280	1580	15000	390	2300	367	#	8.8	18000	NONE	600	800	2.9	850	2.9	1400	6.1	1425	5.4	1750	9.1	
P-38H-LO -1 & -5	15500	2270	3050	91	1360	1620	15000	376	2450	354	#	6.0	15900	NONE	300	400	1.3	400	1.3	700	2.7	665	2.4	900	4.5	
	17500	3040	3350	97	1830	1800	10000	351	2600	340	#	4.0	17000	1000	300	325	1.3	395	1.3	675	2.8	650	2.1	850	4.3	
	19900	4000	-	-	2100	-	5000	347	2800	327	#	1.8	18000	2000	300	375	1.3	375	1.3	625	2.8	600	2.3	800	4.1	
							15000	400	1700	390	#	11.5														
							20000	390	2300	377	#	8.5														
							15000	375	2500	362	#	5.9														
							10000	360	2600	347	#	3.7														
							5000	345	2800	333	#	1.8														
	13600	-	2750	86	-	1150	25000	402	1700	390	#	9.7	20300	NONE	900	1300	5.0	1350	5.0	1750	9.3	1750	8.6	2000	10.0	
	15500	2000	3050	93	1200	1650	20000	387	2300	375	#	7.6	18300	NONE	600	750	2.9	800	2.9	1350	6.1	1350	5.1	1700	9.6	
	17500	2600	3500	100	1600	2000	15000	372	2500	360	#	5.5	16300	NONE	300	350	1.3	375	1.3	650	2.7	650	2.1	850	4.7	
	19500	3500	-	-	2000	-	10000	360	2600	348	#	3.5	18300	2000	300	325	1.3	325	1.3	575	2.8	550	2.3	750	4.0	
	20300	4000	-	-	2300	-	5000	345	2800	332	#	1.8	19500	3200	300	300	1.3	300	1.3	550	2.7	525	2.2	700	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 (Durbank) "LO"

CONFIDENTIAL

THIS PAGE IS UNCLASSIFIED

PAGE 25
AS OF
DATE 26 APRIL 1944

TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART

CONFIDENTIAL

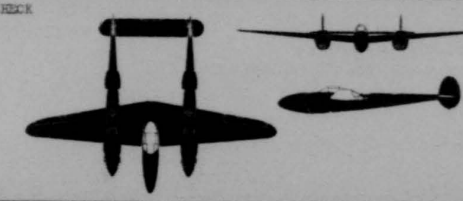
MODEL & BLOCK NO.	ENGINE & PROP.		SIZE		WT.	COMBAT CREW	FUEL		ARMAMENT			BOMBS-CARGO-PASS.		RADIO	REMARKS & REFERENCE			
	NUMBER	ENGINE MFR. MODEL SUPERCHARGER PROP MFR. TYPE	B.H.P./ALT. T-TAKE-OFF M-MILITARY C-CONTINUOUS	S-SPAN L-LENGTH H-HEIGHT T-TREAD W-WING AREA			B-BASIC C-COMBAT R-RECD LIM W-WAR MAX	TANK TYPE OR LOCATION	NO. TANKS & CAPACITY U.S. GAL.	NO. GUNS & CALIBER	RDS. PER GUN	LOCATION & TYPE	INTERNAL NO. & SIZE STATION			EXTERNAL NO. & SIZE CAPACITY	MAX. LOAD LB.	TYPE
P-38 J-LO -5 & -10	2	ALLISON V-1710-89 & -91 TURBO CURTISS 11'6" DIA. - 3BL. F.P., ELECTRIC	T 1125/8 L M 1125/26500 C 1100/32500	S 52' 0" L 37'10" H 12'10" T 15' 6" W 328 sq. ft.	B 13700 C 16450 R 21000 W -	1	MAIN - WINGS RES. - WINGS L.E. - WINGS DROP. - EXTER.	2x 90 2x 60 2x 75 or 2x150 or 2x165 or 2x300	1-20MM 150 4-.50 500 (MAX.)	NOSE - AN M2C" NOSE - FIXED	NONE	2-1600 2-1000 2- 500 2- 325 2- 250 2- 100	3200	SCR-27UN* SCR-515** SCR-522 SCR-695	TECHNICAL ORDER 01-7577-1. (25 SEPT. 1943) * PROVISIONS ONLY. **SPACE PROVIDED.			
P-38 J-LO -5 TO -25 INCL. [L. E. TANKS]	2	AS ABOVE	T 1125/8 L M 1600/26500 C 1100/32500	AS ABOVE	B 11100 C 17600 R 22000 W -	1	MAIN - WINGS RES. - WINGS L.E. - WINGS DROP. - EXTER. (SEE P)	2x 90 2x 60 2x 75 or 150 or 165 or 300 1021 TOT	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	REFERENCE AS ABOVE † THE 2-62 GAL. LEADING EDGE WING TANKS ARE INSTALLED AT FACTORY, MOD. CENTER or FURNISHED TO SERVICE IN KITS. ‡ WAR EMERGENCY RATING.			

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' T.O. DIST. FT.		LANDING SPEED M.P.H.	GROUND-RUN T.O. DIST. FT.		STD. ALT. FT.	MIL. POWER HIGH SPEED M.P.H.		MAX. CONTIN. POWER RATE OF CLIMB FT./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.									
		FT.	FT.		FT.	FT.		M.P.H.	FT./MIN.	M.P.H.	FT./MIN.				MIN.	RANGE MILES	ENDUR. HOURS	RANGE MILES	ENDUR. HOURS	RANGE MILES	ENDUR. HOURS	RANGE MILES		ENDUR. HOURS				
P-38 J-LO -5 & -10	13700 15500 16500 18500 19600 20500	1650 1900 2100 2750 3100 3350	2750 3050 3200 3550 3750 -	100 105 108 116 121 -	900 1050 1150 1500 1850 2000	1150 1650 1750 1900 2000 -	16450	111 106 102 99 97 95	2050 2500 2875 3050 3250 350	377 384 365 353 340 321	10.3 8.0 6.2 4.5 2.9 1.5	20950 19050 16150 18150 19650	NONE NONE NONE 2000 3200	900 630 300 300 300	1000 750 325 300 290	3.8 2.6 1.1 1.1 1.1	1000 775 350 300 275	3.8 2.6 1.1 1.1 1.1	1700 1250 600 525 475	6.7 4.5 2.3 2.2 2.0	1750 1500 600 525 500	6.9 4.6 2.2 2.0 1.9	2100 1675 800 700 650	12.0 9.2 4.5 3.7 3.8	P-38J SERIES HAVE INCREASED DRAG DUE TO EXTERNAL CORE TYPE COOLERS. PERFORMANCE VALUES ARE SHOWN WITHOUT EXTERNAL RACKS.			
P-38 J-LO -5 & -10	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-38 J-LO -5 TO -25 INCL. [MILITARY POWER]	11000 16000 17600 19600 20800 21700	1700 2000 2100 3100 3400 6500	2800 3150 3400 3750 -	102 109 114 121 -	950 1100 1300 1850 2000 -	1500 1700 1850 2000 -	17600	105 98 95 93 91 88	1750 2200 2650 2850 3000 3200	390 378 359 348 336 317	11.3 8.8 6.7 4.9 3.2 1.6	21700 20300 17600 19600 20800	NONE NONE NONE 2000 3200	1024 754 424 424 424	1050 835 460 475 400	4.2 3.1 1.6 1.6 1.6	1073 900 475 710 685	4.2 3.1 1.6 1.6 1.6	1820 1360 800 710 685	7.7 5.2 3.1 3.0 2.9	1880 1160 840 735 725	7.6 5.4 3.1 2.7 2.7	2260 1910 1175 975 900	13.4 12.0 6.7 5.3 5.3	AS ABOVE			
P-38 J-LO -5 TO -25 INCL. [WAR EMER. POWER]	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

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-38
"LIGHTNING"

MANUFACTURED BY LOCKHEED (Burbank) "LO"

CONFIDENTIAL

THIS PAGE IS UNCLASSIFIED

TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART

PAGE 29
15 OF 15
DATE 26 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.		S-SPAN L-LENGTH M-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
			T-TAKE-OFF	M-MILITARY													
P-39D-BE	1	ALLISON V-1710-35 SINGLE SPEED CURTISS 10'5" DIA. - 3BL. CONST. SPD. ELECT.	T 1150/S L	M 1150/12000	C 1000/10800	1	WING TOTALS PROP. - BELLY	12-120 1x75 or 1x156 or 1x175 295 TOT.	4-.30 2-.50 1-37MM	*1000 200 30	WING - FIXED NOSE - FIXED PROP. - TYPE M	NONE	1-500 1-325 1-250 1-100	500	SCR-283	TECHNICAL ORDER 01-110PB-1. (30 JUNE 1943)	
P-39D-BE -1	1	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	1	AS ABOVE	AS ABOVE	4-.30 2-.50 1-30MM	*1000 200 60	WING - FIXED NOSE - FIXED PROP. - TYPE M	AS	AS ABOVE		SCR-274N or 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. ELECT.	T 1325/S L	M 1150/12000	C 1000/10800	1	AS ABOVE	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 AERO PRODUCTS 10'5" DIA. - 3BL. CONST. SPD. ELECT.	T 1150/S L	M 1150/12000	C 1000/10800	1	AS ABOVE	AS ABOVE	AS ABOVE	4-.30 2-.50 1-37MM	*1000 200 30	WING - FIXED NOSE - FIXED PROP. - TYPE M	AS	AS ABOVE		SCR-283	TECHNICAL ORDER 01-110PB-1. (30 JUNE 1943)
P-39K-BE -1	1	ALLISON V-1710-63 SINGLE SPEED AERO PRODUCTS 10'5" DIA. - 3BL. CONST. SPD. ELECT.	T 1325/S L	M 1150/12000	C 1000/10800	1	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS	AS ABOVE	AS ABOVE		SCR-274N or SCR-522A & SCR-535A	TECHNICAL ORDER 01-110PB-1. (30 JUNE 1943)

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'		TO 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.	LAND. DIST.		T.O. DIST.	LAND. DIST.		WEIGHT	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
	LB	FT	FT	MPH	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-39D-BE	6700	-	1850	82	-	1100	25000	324	750	310	#	11.0	8650	NONE	295	550	2.2	-	-	-	-	-	-	1100	6.2
	7600	2800	2050	86	1800	1300	20000	318	1350	332	#	9.1	8800	NONE	276	525	2.0	-	-	-	-	-	-	1050	5.9
	7800	3000	2100	88	2000	1350	15000	360	2000	313	#	6.1	8150	NONE	195	400	1.6	-	-	-	-	-	-	800	4.7
	8150	3400	2200	91	2250	1400	10000	355	2150	315	#	3.9	7650	NONE	120	275	0.9	1.50	1.7	350	1.5	-	-	600	2.9
	8850	4500	-	-	2800	-	5000	335	2550	323	#	1.9	8150	500	120	225	0.9	-	-	250	1.5	-	-	450	2.6
P-39D-BE -1	AS ABOVE						AS ABOVE						AS ABOVE										AS ABOVE		
P-39D-BE -2	AS ABOVE						AS ABOVE						AS ABOVE										AS ABOVE		
P-39F-BE	SIMILAR TO P-39D						AS ABOVE						AS ABOVE										AS ABOVE		
P-39K-BE -1	SIMILAR TO P-39D-2						AS ABOVE						AS ABOVE										AS ABOVE		

NOTES:
RANDOM P-39 MODELS MODIFIED FOR AIR/GROUND SUPPORT BY INSTALLATION OF CAMERAS, BELLY ARMOR, ETC.
* 1000 RDS./GUN MAX. FOR GROUND STRAPPING; 300 RDS./GUN NORMAL.

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



P-39
"AIRACOBRA"

MANUFACTURED BY BELL (Buffalo) "DE"

CONFIDENTIAL

THIS PAGE IS UNCLASSIFIED

TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART

PAGE 27
AS OF:
DATE 26 APR. 1944

MODEL & BLOCK NO.	ENGINE & PROP.		SIZE		WT.	COMBAT CREW	FUEL		ARMAMENT			BOMBS - 1000-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 US GAL	NO. GUNS & CALIBER	RDS PER GUN	LOCATION & TYPE	INTERNAL NO. & SIZE OR STATION	EXTERNAL NO. & SIZE OR CAPACITY			MAX. LOAD LB.	TYPE
P-39L-BE -1	1	ALLISON V-1710-63 SINGLE SPEED CURTISS 10'5" DIA. - 3BL. CONST. SPD. HYDR.	T 1325/5 L M 1150/12000 C 1000/10800	S 34' 0" L 30' 2" H 11'10" T 11' 4" W 213 SQ. FT.	B 6500 C 7900 R 9200 W -	1	WING TOTALS DROP.-BELLY 1 x 75 or 1 x 156 or 1 x 175 295 TOT.	12-120	4-.50 1-37MM	*1000 200 30	WING - FIXED NOSE - FIXED PROP. - TYPE M4	NONE	1-500 1-325 1-350 1-100	500	SCR-274N or SCR-522A & SCR-535A	TECHNICAL ORDER 01-110PM-1. (30 JUNE 1943)		
P-39M-BE -1	1	ALLISON V-1710-63 SINGLE SPEED CURTISS 10'5" DIA. - 3BL. CONST. SPD. HYDR.	T 1200/5 L M 1125/15500 C 1000/11000	AS ABOVE	AS ABOVE	1	AS ABOVE	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.	1	ALLISON V-1710-85 (A) SINGLE SPEED AERO PRODUCTS 11'7" DIA. - 3BL. CONST. SPD. HYDR.	AS ABOVE	S 34' 0" L 30' 2" H 12' 5" T 11' 4" W 213 SQ. FT.	B 6400 C 7600 R 9200 W -	1	WING TOTALS DROP.-BELLY 1 x 75 or 1 x 156 or 1 x 175 292 TOT.	6-67	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	SCR-274N 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-39N-0 BUILT-IN FUEL 120 GAL. KITS AVAIL- ABLE IN SERVICE TO INCREASE FUEL OF ALL N's TO 120 GAL.		
P-39Q-BE -1 TO -15 INCL.	1	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 & -15-120 GAL	12-120	2-.50 3-.50 1-37MM	300 200 30	WING - FIXED NOSE - FIXED PROP. - TYPE M4	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	SCR-274N 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.	
P-39Q-BE -20 TO -30 INCL.	1	ALLISON V-1710-85 (A) SINGLE SPEED AERO PRODUCTS 11'7" DIA. - 4BL. CONST. SPD. HYDR.	AS ABOVE	AS ABOVE	AS ABOVE	1	WING TOTALS DROP.-BELLY 1 x 75 or 1 x 156 or 1 x 175 295 TOT.	12-120	2-.50 1-37MM	200 30	WING - FIXED NOSE - FIXED PROP. - TYPE M4	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	REFERENCE AS ABOVE * P-39Q-20 HAS 3 BLADED PROPELLER; 11'7" DIA. P-39Q-30 HAS 3 BLADED PROPELLER; 11'0" DIA.	
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. FT.		LANDING SPEED MPH	GROUND-RUN DIST. FT.		STD. ALT. FT.	MIL. POWER		MAX. CONTIN. POWER		TAKE OFF WEIGHT LB.	BOMBS CARGO PASS.	TOTAL FUEL LB.	MAX. CONTINUOUS POWER		MAX. CRUISE POWER		LONG RANGE										
		T.O.	LAND.		T.O.	LAND.		HIGH SPEED	RATE OF CLIMB	HIGH SPEED	RATE OF CLIMB				RANGE	ENDUR.	RANGE	ENDUR.	RANGE	ENDUR.	RANGE	ENDUR.		RANGE	ENDUR.				
		FT.	FT.		FT./MIN.	FT.		FT.	MPH	FT./MIN.	MPH				FT./MIN.	MIN.	MILES	HOURS	MILES	HOURS	MILES	HOURS		MILES	HOURS	MILES	HOURS		
P-39L-BE -1	7000 7400 7900 8400 9100	- 2500 3100 3750 5000	1950 2000 2100 - -	84 86 89 - -	- 1750 2050 2500 3600	1150 1200 1300 -	7900	25000 20000 15000 10000 5000	323 347 360 354 335	650 1250 1900 2350 2900	309 330 342 341 322	11.9 9.7 6.6 4.2 2.1	9100 8400 7900 8400	NONE NONE NONE NONE	295 195 120 120	500 100 250 200	2.0 1.6 0.9 1.2	950 550 425 275	3.5 2.4 1.5 1.5	- - - -	- - - -	1075 750 550 400	6.0 4.2 2.5 2.3						
P-39M-BE -1	7000 7400 7900 8400 9100	- 3100 3750 4400 5500	1950 2000 2100 - -	84 86 89 - -	- 1750 2050 2500 3600	1150 1200 1300 -	7900	25000 20000 15000 10000 5000	357 365 370 350 330	1200 1775 2400 2250 2050	343 352 357 337 320	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				
P-39N-BE -0 TO -5 INCL. P-39Q-1BE	2550 3090 3600 3700	1850 2050 2150 -	83 85 87 -	1650 2000 2400 -	1100 1300 1400 -	7600	25000 20000 15000 10000 5000	368 375 376 357 330	1175 1825 2450 2600 2600	350 355 365 345 320	11.9 8.5 6.1 4.0 2.0	8750 8600 8050 7550 8050	NONE NONE NONE NONE NONE	262 213 162 87 87	500 450 350 175 150	2.0 1.8 1.4 0.6 0.6	650 775 525 300 225	3.5 3.2 2.8 1.0 1.0	- - - - -	- - - - -	975 600 625 550 475	5.4 5.0 3.3 1.7 1.3	RANGE AND ENDURANCE OF 1st. 166 P-39N-0 ARTICLES SAME AS P-39Q-10 to -30 LISTED 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	SEE NOTE (B) BELOW.
P-39Q-BE -10 TO -30 INCL.	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	NOTE: PRELIMINARY TESTS OF P-39Q-21 & -25 SHOW THAT 4 BLADED PROPELLER DOES NOT MATERIALLY EFFECT PERFORM. SEE NOTE (B) BELOW.
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:

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

* 1000 RIB./GUN MAX. WGR GROUND STRAPPING; 300 RIB./GUN NORMAL.

ATTENTION:

KITS AVAILABLE IN SERVICE TO INCREASE BUILT-IN FUEL CAPACITY OF ALL P-39Q & P-39N MODELS TO 120 GAL.; PERFORMANCE WILL BE SAME AS SHOWN FOR P-39Q-10 thru -30 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-39N-0 to -5 & P-39Q-1 & -5 IN THE NEAR FUTURE; P-39Q-10 thru -30 HAVE AN AUTOMATIC SPEED-BOOST CONTROL.

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



P-39
"AIRACOBRA"

MANUFACTURED BY BELL (Buffalo) "BE"

CONFIDENTIAL

THIS PAGE IS UNCLASSIFIED

PAGE 28
DATE 27 APR 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 OR STATION		EXTERNAL NO. & SIZE OR CAPACITY	MAX. LOAD LB.	TYPE		
P-40E & E-1 -CU	1	ALLISON V-1710-39 SINGLE SPEED CURTISS 11'0" DIA. - 3BL. CONST. SPD. ELECT.	T 1150/S L M 1150/11700 C 1000/10800	S 37'4" L 31'9" H 12'4" T 8'2" W 236 SQ. F.	B 6900 C 8400 R 10000 W -	1	REAR - WING FRONT - WING FUSELAGE DROOP - BELLY	1 x 52 1 x 35 1 x 62 1 x 52	6-.50	281 (average)	WING - FIXED	NONE	1-500 & 2-100 or 6-20. 1-325 1-250 1-100	700	SCR-263 or SCR-271W	TECHNICAL ORDER 01-250P-1. (REV. 20 OCT. '43) * NO EXTERNAL WING BOMBS ON EARLY MODELS. * WITHOUT RAM.			
P-40F-CU -I TO -20 INCL.	1	PACKARD V-1650-1 SINGLE STG. - 2 SPD CURTISS 11'0" DIA. - 3BL. CONST. SPD. ELECT.	T 1300/S L M 1240/11500 C 1080/9500 1010/16000	S 37'4" L 33'4" H 12'4" T 8'2" W 236 SQ. F.	B 7000 C 8500 R 10000 W -	1	REAR - WING FRONT - WING FUSELAGE DROOP - BELLY	1 x 54 1 x 37 1 x 66 1 x 52.75 150 or 170 327 TOT.	A S	A B O V E	A S	A B O V E	AS ABOVE	SCR-271W or SCR-522A * SCR-535A or SCR-695	TECHNICAL ORDER 01-250H-1 (20 JUNE 1943) REVISED * P-40F-1 LENGTH SAME AS P-40E. ALL SUBSEQUENT MODELS HAVE EXTENDED FUSELAGE.				
P-40K-CU -I TO -15 INCL.	1	ALLISON V-1710-73 SINGLE SPEED CURTISS 11'0" DIA. - 3BL. CONST. SPD. ELECT.	T 1325/S L M 1150/11800 C 1000/11000	AS ABOVE	B 6950 C 8400 R 10000 W -	1	AS ABOVE	AS ABOVE	A S	A B O V E	A S	A B O V E	AS ABOVE	AS ABOVE	TECHNICAL ORDER 01-250K-1 (25 MAY 1943) REV. * P-40K-1 & -5 LENGTH SAME AS P-40E. ALL SUBSEQUENT MODELS HAVE EXTENDED FUSELAGE. * WITHOUT RAM.				
P-40L-CU -I TO -20 INCL.	1	PACKARD V-1650-1 SINGLE STG. - 2 SPD CURTISS 11'0" DIA. - 3BL. CONST. SPD. ELECT.	T 1300/S L M 1240/11500 C 1080/9500 1010/16000	AS ABOVE	B 7000 C 8500 R 10000 W -	1	REAR - WING FUSELAGE DROOP - BELLY	1 x 54 1 x 66 1 x 52.75 150 or 170 291 TOT.	* 4-.50	201 (average)	WING - FIXED	A S	A B O V E	AS ABOVE	TECHNICAL ORDER 01-250L-1 (REV. 20 JUNE '43) * P-40L-1 FUEL AND ARMAMENT SAME AS P-40F SERIES.				
P-40M-CU -I TO -10 INCL.	1	ALLISON V-1710-81 SINGLE SPEED CURTISS 11'0" DIA. - 3BL. CONST. SPD. ELECT.	T 1200/S L M 1125/17300 C 1000/16400	AS ABOVE	B 6950 C 8400 R 10000 W -	1	REAR - WING FRONT - WING FUSELAGE DROOP - BELLY	1 x 54 1 x 37 1 x 66 1 x 52.75 150 or 170 327 TOT.	6-.50	281 (average)	WING - FIXED	A S	A B O V E	AS ABOVE	TECHNICAL ORDER 01-250M-1. (REV. 25 MAY '43)				

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. DIST.		LANDING SPEED M.P.H.	GROUND-RUN DIST.		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 M.P.H.	RATE OF CLIMB FT./MIN.	HIGH SPEED M.P.H.	RATE OF CLIMB FT./MIN.				RANGE MILES	ENDUR. HOURS	RANGE MILES	ENDUR. HOURS	RANGE MILES	ENDUR. HOURS	RANGE MILES		ENDUR. HOURS
P-40E & E-1 -CU	7500 8100 8400 8700 9100	- 2800 3125 3600 4300	1550 1700 1750 - -	84 87 90 - -	950 1600 1800 1950 2300	1050 1100	25000 20000 15000 10000 5000	- 330 362 342 320	- 980 1160 2170 2100	265 300 312 313 296	520 300 312 313 296	18.2 11.5 7.6 4.8 2.4	9100 8700 9200	NONE NONE 500	201 116 116	425 325 300	1.7 1.2 1.2	- - -	675 525 450	3.0 2.2 2.1	- - -	850 650 575	4.5 3.3 3.1	
P-40F-CU -I TO -20 INCL.	7500 8850 9200 9350 9550 10000	- 3700 4350 4400 4700 5750	1100 1900 2450 2550 2700 3100	81 87 87 87 87	1050 1250 1300 1350 1400 -	1050	25000 20000 15000 10000 5000	350 364 352 340 320	1000 1400 1860 2210 2160	500 320 332 320 300	18.3 11.6 7.6 4.5 2.4	10000 9350 9200 8850 9550	NONE NONE NONE NONE 700	327 232 209 157 157	- 550 475 425 325	- 2.0 1.7 1.8 1.3	- 550 575 425 350	2.3 2.0 1.8 1.8	600 700 600 500	3.4 3.0 2.2 2.2	- - - -	1500 1500 875 700 600	5.0 5.0 4.4 3.1 3.2	
P-40K-CU -I TO -15 INCL.	7500 8800 9150 9300 9500 10000	- 2950 3150 3200 3350 -	1700 1950 2000 2050 2100 -	81 87 87 87 87	1050 1300 1350 1400 -	1050	25000 20000 15000 10000 5000	- 330 362 342 320	265 1100 1650 2000 2100	350 300 312 313 296	18.5 11.2 7.5 4.9 2.4	10000 9300 9150 8800 9500	NONE NONE NONE NONE 700	327 232 209 157 157	- 500 400 350 300	- 1.9 1.6 1.2 1.2	- - - -	900 750 600 550	3.9 3.4 2.4 2.4	- - - -	1100 1000 900 700 600	7.0 5.5 4.8 3.4 3.3		
P-40L-CU -I TO -20 INCL.		SUBSTANTIALLY SAME AS P-40F					8500	SUBSTANTIALLY SAME AS P-40F					10000 9750 9100 8600 9100	NONE NONE NONE NONE 700	327 291 195 120 120	- - 1.6 0.9 0.9	- - 425 300 250	- - 1.8 1.3 1.3	- - 650 425 350	- - 2.8 1.6 1.6	- - - -	1500 1500 800 500 425	5.0 5.2 4.1 2.2 2.3	P-40L-1 ONLY SAME AS P-40F SERIES.
P-40M-CU -I TO -10 INCL.	7500 8400 8800 9300 10000	- 2350 2650 3150 4000	1700 1850 1950 2000 -	81 85 85 85	1050 1200 1300 1350 -	1050	25000 20000 15000 10000 5000	353 360 361 346 328	850 1500 2025 2180 2070	330 335 338 320 308	14.7 10.2 7.2 4.5 2.4	10000 9300 8800 9500	NONE NONE NONE 700	327 232 157 157	650 450 325 300	2.5 1.8 1.1 1.1	- 750 475 375	2.9 1.8 1.8 1.8	1200 900 600 475	5.6 4.2 2.5 2.5	- - -	1150 1000 700 575	5.4 5.6 3.7 3.3	

NOTES:

RED FIGURES ARE PRELIMINARY; SUBJECT TO REVISION AFTER FLIGHT CHECK

* MILITARY POWER AVAILABLE FOR 5 MINUTES ONLY.

* MILITARY POWER AVAILABLE FOR 15 MINUTES.



P-40
"WARHAWK"

MANUFACTURED BY CURTISS (Buffalo) "CU"

CONFIDENTIAL

THIS PAGE IS UNCLASSIFIED

TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART

PAGE 29
1st OF 1
DATE 25 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 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-40N-CU -1	1	ALLISON V-1710-S1 SINGLE SPEED CURTISS 11'0" DIA. - 3 BL. CONST. SPD. SUPERCH.	T 1200/8 L M 1125/17300 C 1000/16400	S 37'4" L 33'4" H 12'4" T 8'2" W 236 SQ. FT.	B 6400 C 7725 R 11000 W -	1	REAR - WING FUSELAGE DROP. - BELLY	1 x 54 1 x 68 1x52,75, 150 or 170 225 TOT.	4-.50	201 (average)	WING - FIXED	NONE	1-500 & 2-100 or 6-20. 1-250 1-250 1-100	500	SCR-271M or SCR-522A & SCR-695	TECHNICAL ORDER 01-25CN-1. (REV. 10 OCT. '43) * PROVISIONS FOR RACES ONLY.
P-40N-CU -5 TO -15 INCL.	1	AS ABOVE	AS ABOVE	AS ABOVE	B 6700 C 8400 R 11500 W -	1	REAR - WING FRONT - WING FUSELAGE DROP. - BELLY (SEE REMARKS)	1 x 54 1 x 37 1 x 70 1x75, 150 or 225 * 611 TOT.	6-.50	261 (average)	WING - FIXED	NONE	1-500 & 2-500 or 2-100 or 6-20. 1-250 1-250 1-100	1500	SCR-271M 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 THRU -35	1	ALLISON V-1710-99 SINGLE SPEED CURTISS 11'0" DIA. - 3 BL. CONST. SPD. SUPERCH.	AS ABOVE	AS ABOVE	AS ABOVE	1	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	SCR-271M or SCR-522A & SCR-695. MW-26 on some models	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						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		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 10,000 FT.	AT 25,000 FT.	AT 10,000 FT.	AT 25,000 FT.		RANGE	ENDUR.	RANGE	ENDUR.	RANGE	ENDUR.	
LB.	FT.	FT.	MPH	FT.	FT.	LB.	MPH	FT/MIN.	MPH	FT/MIN.	MIN.	LB.	LB.	U.S. GAL.	MILES	HOURS	MILES	HOURS	MILES	HOURS	MILES	HOURS				
P-40N-CU -1	7000	-	1650	92	-	1000	7725	25000	332	1225	313	#	12.4	8850	NONE	292	600	2.2	-	-	1050	4.9	-	-	1250	7.4
	7725	2150	1750	96	1350	1100		20000	346	1850	330	#	9.1	8250	NONE	197	380	1.5	500	2.1	750	3.6	-	-	850	3.8
	8250	2950	1750	105	1700	1100		15000	348	2400	333	#	6.7	7725	NONE	122	230	0.9	290	1.2	450	1.9	-	-	520	2.8
	8425	3100	1850	-	1800	1150		10000	351	2525	315	#	4.1	8225	900	122	210	0.9	260	1.2	420	2.0	-	-	480	2.5
P-40N-CU -5 TO -15 INCL.	7000	-	1650	92	-	1000	8400	25000	325	900	306	#	13.0	11400	NONE	611	1250	4.9	-	-	2250	10.9	-	-	2800	15.7
	8400	2700	1850	100	1650	1200		20000	340	1550	325	#	8.8	9500	NONE	331	675	2.6	-	-	1250	6.0	-	-	1550	8.4
	8900	3550	1850	109	2050	1200		15000	343	2130	328	#	6.0	8900	NONE	256	470	1.8	600	2.5	930	4.3	-	-	1080	5.7
	9100	3800	1900	-	2200	1250		10000	325	2230	310	#	4.7	8400	NONE	161	320	1.2	400	1.6	600	2.6	-	-	750	3.9
P-40N-CU -20 THRU -35	9500	4450	-	-	2250	-	5000	308	2120	241	#	2.4	8900	900	161	300	1.2	370	1.6	590	2.8	-	-	-	-	
	11400	5700	-	-	3500	-																				
	AS ABOVE																									

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

RANGE FOR MAX. CONTINUOUS AND MAX. CRUISE POWER APPROX. AS ABOVE; LONG RANGE CONDITIONS SHOWN ABOVE MAY NOT BE ATTAINED ON SOME AIRPLANES BECAUSE OF PRESENT SET UP OF AUTOMATIC SPEED-BOOST CONTROL.



P-40
"WARHAWK"

MANUFACTURED BY CURTISS (Buffalo) "CU"

CONFIDENTIAL

THIS PAGE IS UNCLASSIFIED

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.	B.H.P./ALT.	S-SPAN		B-BASIC	TANK	NO. TANKS	NO. GUNS	RDS PER GUN	LOCATION & TYPE	INTERNAL	EXTERNAL	MAX. LOAD LB.		TYPE
		MODEL	T-TAKE-OFF	L-LENGTH		C-COMBAT	TYPE	& CAPACITY				NO. & SIZE	NO. & SIZE			
P-47C-RE -170-3 P-47D RE & RA -170-21 P-47G-CU -170-16	1	PRATT-WHITNEY R-2800-21, 59, -63 TURBO CURTISS 12' 2" DIA. - LBL. CONST. SPD. ELECTR.	T 2000 / S L M 2000/27000 W 2300/27000 C 1625/29000	S 40'9" L 36'1" H 14'2" W 15'6" W 300 SQ. FT.	B 10700 C 15500 R 15000 W -	1	MAIN - FUS. AUX. - FUS. DROPP. BELLY EXT. - WINGS & BELLY (SEE F)	1x205 1x100 1x 75 or 110 or 200 2x150 & 1x 75 680 TOT.	6) or 5)	267 WGR. 125 MAX.	WING - FIXED	NONE	a 1-500 or b 2-500 or c 3-500	1500	SCR-274A SCR-522A & SCR-535A SCR-695	TECHNICAL ORDER 01-058C-1 (REV. 20 NOV. '45) ALL BUT EARLY P-47D'S HAVE B-7 SHACKLE FOR BELLY TANK OR BOMB; WING RACKS FOR TANKS OR BOMBS. ONLY EARLY MODELS CARRY 200 GAL. DROPPABLE BELLY TANK. THE R-2800-21 ENGINE WILL HAVE WAR EMERGENCY R-TIME WHEN WATER INJECTION IS INSTALLED & REDESIGNATED (-63).
P-47D-RE -22	1	PRATT-WHITNEY R-2800-59 TURBO HAMILTON STD. 13' 0" DIA. - LBL. CONST. SPD. HYDRO.	AS ABOVE	AS ABOVE	AS ABOVE	1	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	REFERENCE AS ABOVE
P-47D-RA -23	1	PRATT-WHITNEY R-2800-59 TURBO CURTISS 13' 0" DIA. - LBL. CONST. SPD. ELECTR.	AS ABOVE	AS ABOVE	AS ABOVE	1	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	REFERENCE AS ABOVE FIRST MODEL EQUIPPED WITH BUBBLE CANOPY.
P-47D-RE -25	1	PRATT-WHITNEY R-2800-59 TURBO HAMILTON STD. 13' 0" DIA. - LBL. CONST. SPD. HYDRO.	AS ABOVE	AS ABOVE	AS ABOVE	1	MAIN - FUS. AUX. - FUS. DROPP. BELLY EXT. - WINGS & BELLY (SEE F)	1x270 1x100 1x 75 or 1x110 2x150 & 1x110 780 TOT.	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE
P-47D-RA -26	1	PRATT-WHITNEY R-2800-59 TURBO CURTISS 13' 0" DIA. - LBL. CONST. SPD. ELECTR.	AS ABOVE	AS ABOVE	AS ABOVE	1	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	REFERENCE AS ABOVE

MODEL & BLOCK NO.	TAKE OFF & LANDING						HIGH SPEED & CLIMB						RANGE & ENDURANCE						REMARKS						
	HARD SURFACE - NO WIND						AT NORMAL COMBAT WEIGHT						STATUTE AIR MILES - NO WIND - NO ALLOWANCE FOR RESERVE												
	GROSS WEIGHT	T.O. DIST.	LAND. DIST.	LANDING SPEED	T.O. DIST.	LAND. DIST.	WEIGHT	STD. ALT.	WAR EMERG. HIGH SPEED	MIL. POWER RATE OF CLIMB	MAX. CONTIN. POWER HIGH SPEED	RATE OF CLIMB	TIME TO CLIMB	TAKE OFF WEIGHT	BOMBS CARGO	TOTAL FUEL	MAX. CONTINUOUS POWER			MAX. CRUISE POWER		LONG RANGE			
P-47C-RE -170-3 P-47D RE & RA -170-21 P-47G-CU -170-16	11000	-	2900	98	-	1200	30000	433	1375	420	-	300	20.0	16200	NONE	620	700	3.0	550	3.0	-	-	1725	8.3	
P-47D-RE -22	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-47D-RA -23	12000	3200	2300	98	2100	1500	30000	426	1600	411	1560	382	13.5	16900	NONE	715	-	-	-	-	-	-	1850	8.8	
P-47D-RE -25	13500	3300	2500	104	2200	1700	30000	421	1825	416	1750	375	15.0	15600	NONE	605	-	-	-	-	-	-	-	-	-
P-47D-RA -26	15000	3800	2700	106	2300	1800	30000	398	2525	395	2265	363	8.1	15100	NONE	455	-	-	-	-	-	-	-	-	-

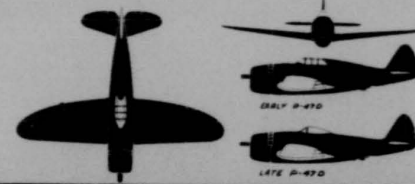
NOTES: (A) R-2800-21 (WATER INJECTION PROVISIONS: KITS AVAILABLE FOR INSTALLATION) (A) R-2800-59 (WATER INJECTION & NEW ELECTRICAL HARNESS) (A) R-2800-63 (WATER INJECTION)

USED ON: P-47C-RE (-1, -2 & -5) P-47D-RE (-1, -2, -3, -4 & -5) P-47D-RA (-6) P-47G-CU (-1, -5 & -10)

USED ON: P-47D-RE (-20, -21, -22 & -25) P-47D-RA (-20, -21, -23 & -26)

USED ON: P-47D-RE (-10, -11, -15 & -16) P-47D-RA (-11 & -15) P-47G-CU (-15 & -16)

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



P-47
"THUNDERBOLT"

CONFIDENTIAL

THIS PAGE IS UNCLASSIFIED

TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART																		
CONFIDENTIAL																		
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 NO & SIZE OR STATION	EXTERNAL NO & SIZE OR CAPACITY			MAX. LOAD LB.	TYPE
P-51-NA -1 & -2	1	ALLISON V-1710-39 SINGLE SPEED CURTISS	1150/5 L	37' 0"	7050	1	MAIN-R. WING MAIN-L. WING RES.-L. WING	1 x 90 1 x 59 1 x 31 180 TOT.	4-20MM	125	WING-TYPE W2	NO BOMBS CARRIED	SCR-271M & SCR-535	TECHNICAL ORDER 01-60JB-1. (10 JAN. 1943)				
P-51A-NA -1 TO -10 INCL.	1	ALLISON V-1710-61 SINGLE SPEED CURTISS	1200/5 L	AS ABOVE	6650	1	MAIN-R. WING MAIN-L. WING EXT.-WINGS	1 x 90 1 x 90 2 x 75 or 2 x 150 180 TOT.	2) .50 2) .50	280 350	OUTRD.-WING INRD.-WING	NONE	2-500 2-325 2-250 2-100	1000 SCR-271M SCR-535 SCR-515** SCR-522 SCR-695	TECHNICAL ORDER 01-60JO-1. (25 OCT. 1943) * PROVISIONS ONLY ** SPACE PROVIDED			

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.		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 ENDUR. MILES HOURS	RANGE ENDUR. MILES HOURS	RANGE ENDUR. MILES HOURS	RANGE ENDUR. MILES HOURS
P-51-NA	7500	-	2600	88	-	1700	25000	337	800	315	300	16.0												
	8000	2600	2850	91	1600	1900	20000	367	1300	333	107.9													
	8500	3000	3100	94	1900	2100	15000	387	1800	343	7.6													
	8800	3200	3250	-	2100	2250	10000	379	2000	352	5.0	8600	NONE	180	450	1.5	700	2.6	700	2.7	-	-	1000	4.5
	9000	3400	-	-	2200	-	5000	357	2000	352	2.5													
P-51A-NA -1 TO -10 INCL.	8000	-	2450	100	-	1550	25000	375	1100	360	12.7	10600	NONE	180	1135	4.1	-	-	2000	8.3	-	-	2350	11.4
	8600	2050	2750	103	1400	1850	20000	390	1650	375	9.1	9600	NONE	330	725	2.7	-	-	1250	5.3	-	-	1925	7.9
	9100	2250	3000	106	1600	2100	15000	380	2300	365	6.6	8600	NONE	180	425	1.4	-	-	750	2.8	-	-	1000	4.8
	9600	2500	3250	-	1800	2350	10000	360	2300	345	4.4	9100	500	180	415	1.4	-	-	725	2.8	-	-	950	4.7
	10300	2900	-	-	2100	-	5000	340	2300	325	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



THIS PAGE IS UNCLASSIFIED

TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART

PAGE 33
AS OF
DATE 22 APRIL 1944

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-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		
P-51B-NA -14-5 P-51C-NT -1	PACKARD V-1650-3 2 SPEED- 2 STAGE HAMILTON STD. 11'2" DIA. - 4 BL. CONST. SPD. HYDRO.	T 1100 / S L M 1150 / 19800 W 1190 / 31000 C 1120 / 20500 940 / 54000	S 37' 0" L 32' 3" H 13' 8" T 11' 10" W 233 Sq.'	B 7300 C 9000 R 11000 W -	1	MAIN-R. WING MAIN-L. WING DROP.-WINGS SEE (r)	1 x 92 1 x 92 2 x 75 2 x 150 569 TOT.	2) .50 2) .50	280 350	OUTSD.-WINGS INBD.-WINGS	NONE	2-500 2-325 2-250 2-100	1000	SCR-27LN SCR-522 SCR-535A or SCR-695	TECHNICAL ORDER OI-60JD-1. (20 DEC. 1943) KITS AVAILABLE FOR 1x85 GAL. FUSELAGE TANK; WHEN INSTALLED THESE MODELS WILL BE SAME AS ONES LISTED BELOW. WAR EMERGENCY RATINGS: 1595/17000' & 1255/28800' (RESTRICTED TO MODELS EQUIPPED WITH ILO-RC5/3 or LODGE RS5/5 SPARK PLUGS.)
P-51B-NA -7410 P-51C-NT -3	AS ABOVE	AS ABOVE	AS ABOVE	B 7390 C 9800 R 11800 W -	1	MAIN-R. WING MAIN-L. WING FUSELAGE DROP.-WINGS	1 x 92 1 x 92 1 x 85 2 x 150 569 TOT.	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	SCR-27LN SCR-522 or SCR-27LN & MN-26C COMBINATIO	REFERENCE AS ABOVE NOTE: LAST 500 P-51B-5 MODELS BECOME B-7 UPON ADDITION OF 1x85 GAL. FUSELAGE TANK. P-51C-3 ARE MODIFIED P-51C-1's.
P-51B-NA -15 P-51C-NT -54-10	PACKARD V-1650-7 2 SPEED- 2 STAGE HAMILTON STD. 11'2" DIA. - 4 BL. CONST. SPD. HYDRO.	T 1190 / S L M 1630 / 13600 W 1390 / 27200 C 1230 / 17000 1100 / 29000	AS ABOVE	B 7390 C 9800 R 11800 W -	1	AS ABOVE	SEE (r)	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	REFERENCE AS ABOVE WAR EMERGENCY RATINGS: 1790/11500' & 1530/21500' (RESTRICTED TO MODELS EQUIPPED WITH ILO-RC5/3 or LODGE RS5/5 SPARK PLUGS.) SOME P-51C-5-WT MODELS FOR RECONNAISSANCE WILL NOT CARRY 1x85 GAL. FUSELAGE TANK.
P-51D-NA -5	AS ABOVE	AS ABOVE	AS ABOVE	B 7635 C 10100 R 11800 W -	1	MAIN-R. WING MAIN-L. WING FUSELAGE DROP.-WINGS	1 x 92 1 x 92 1 x 85 2 x 75 419 TOT.	2) .50 2) .50	270 270 380 190 190	OUTSD.-WINGS CENTER-WINGS INBD.-WINGS OUTSD.-WINGS INBD.-WINGS	AS ABOVE	AS ABOVE	AS ABOVE	SCR-522 or PARTIAL SCR-27LN INSTALL.	TECHNICAL ORDER OI-60JE-1.

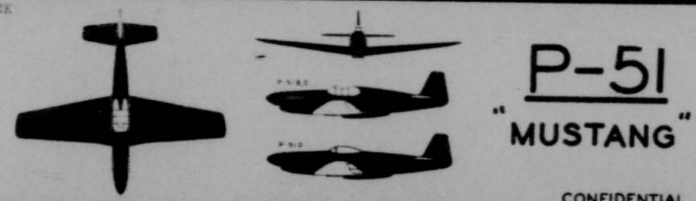
COLUMN — | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17

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						
	GROSS WEIGHT		TO CLEAR 50'		GROUND-RUN		STD. ALT.	WAR EMERG.		MIL. POWER		MAX. CONTIN. POWER			TAKE OFF WEIGHT	BOMBS CARGO PASS.	TOTAL FUEL	MAX. CONTINUOUS POWER		MAX. CRUISE POWER			LONG RANGE		
	LB.		T.O. DIST. FT.	LAND. DIST. FT.	T.O. DIST. FT.	LAND. DIST. FT.		FT.	MPH.	RATE OF CLIMB FT/MIN.	HIGH SPEED MPH.	RATE OF CLIMB FT/MIN.	HIGH SPEED MPH.	RATE OF CLIMB FT/MIN.				TIME TO CLIMB MIN.		LB.	LB.	U.S. GAL.	AT 10000 FT.	AT 25000 FT.	AT 10000 FT.
P-51B & C (V-1650-3)	8000 9000 9500 10000 11000	- 1800 1950 2100 2200	250 2600 2700 2820 2900	100 103 106 109 -	1550 1650 1750 1850 -	30000 25000 20000 15000 10000 5000	1750 2100 2500 3200 3580 398	11.2 8.7 6.5 4.8 3.2 1.6	1750 2180 2500 3200 3580 398	140 140 140 140 140 140	1750 2180 2500 3200 3580 398	11.2 8.7 6.5 4.8 3.2 1.6	11100 10000 9000 8000 7000 6000	NONE 334 124 124 500 1000	324 334 124 124 500 1000	1300 875 585 485 600 750	4.6 3.2 1.7 1.7 2.0 1.7	1725 1125 800 500 600 585	5.6 3.8 1.9 2.0 2.6 2.0	1800 1200 750 650 650 635	7.0 5.0 2.8 2.9 2.9 2.6	- - - - - -	2250 1575 975 900 885 885	11.1 8.4 5.2 4.7 4.3 4.3	NOTE: HIGH SPEED AND CLIMB SHOWN WITHOUT BOMB RACES. RACES DECREASE HIGH SPEED 12 MPH. AND RATE OF CLIMB LESS THAN 100'/MIN.
P-51B & C (V-1650-7)	8000 9000 9500 10000 11000	- 1800 1950 2100 2200	250 2600 2700 2820 2900	100 103 106 109 -	1550 1650 1750 1850 -	30000 25000 20000 15000 10000 5000	1750 2100 2500 3200 3580 398	11.2 8.7 6.5 4.8 3.2 1.6	1750 2180 2500 3200 3580 398	140 140 140 140 140 140	1750 2180 2500 3200 3580 398	11.2 8.7 6.5 4.8 3.2 1.6	11100 10000 9000 8000 7000 6000	NONE 334 124 124 500 1000	324 334 124 124 500 1000	1300 875 585 485 600 750	4.6 3.2 1.7 1.7 2.0 1.7	1725 1125 800 500 600 585	5.6 3.8 1.9 2.0 2.6 2.0	1800 1200 750 650 650 635	7.0 5.0 2.8 2.9 2.9 2.6	- - - - - -	2290 1650 935 825 825 825	10.4 6.9 3.8 3.9 3.9 3.6	AS ABOVE
P-51B & C (V-1650-3) FUSELAGE TANK	8000 9000 9500 10000 11000	- 1800 1950 2100 2200	250 2600 2700 2820 2900	100 103 106 109 -	1550 1650 1750 1850 -	30000 25000 20000 15000 10000 5000	1750 2100 2500 3200 3580 398	11.2 8.7 6.5 4.8 3.2 1.6	1750 2180 2500 3200 3580 398	140 140 140 140 140 140	1750 2180 2500 3200 3580 398	11.2 8.7 6.5 4.8 3.2 1.6	11100 10000 9000 8000 7000 6000	NONE 334 124 124 500 1000	324 334 124 124 500 1000	1300 875 585 485 600 750	4.6 3.2 1.7 1.7 2.0 1.7	1725 1125 800 500 600 585	5.6 3.8 1.9 2.0 2.6 2.0	1800 1200 750 650 650 635	7.0 5.0 2.8 2.9 2.9 2.6	- - - - - -	2600 1800 1350 1275 1225 1200	11.2 8.0 6.5 6.5 6.5 6.3	AS ABOVE
P-51B & C (V-1650-7) FUSELAGE TANK	8000 9000 9500 10000 11000	- 1800 1950 2100 2200	250 2600 2700 2820 2900	100 103 106 109 -	1550 1650 1750 1850 -	30000 25000 20000 15000 10000 5000	1750 2100 2500 3200 3580 398	11.2 8.7 6.5 4.8 3.2 1.6	1750 2180 2500 3200 3580 398	140 140 140 140 140 140	1750 2180 2500 3200 3580 398	11.2 8.7 6.5 4.8 3.2 1.6	11100 10000 9000 8000 7000 6000	NONE 334 124 124 500 1000	324 334 124 124 500 1000	1300 875 585 485 600 750	4.6 3.2 1.7 1.7 2.0 1.7	1725 1125 800 500 600 585	5.6 3.8 1.9 2.0 2.6 2.0	1800 1200 750 650 650 635	7.0 5.0 2.8 2.9 2.9 2.6	- - - - - -	2600 1850 1250 1225 1225 1200	12.0 8.7 5.7 5.7 5.7 5.6	AS ABOVE
P-51D (V-1650-3)	8000 8700 9400 10100 10600 11100	- 1830 2120 2430 2650 2950	250 2620 2800 2970 -	100 104 108 112 -	1550 1700 1830 1970 -	30000 25000 20000 15000 10000 5000	1750 2130 2530 3175 387	11.2 10.1 7.5 5.4 3.6 1.8	1750 2180 2500 3200 3580 398	140 140 140 140 140 140	1750 2180 2500 3200 3580 398	11.2 10.1 7.5 5.4 3.6 1.8	11100 10100 10600 11100	NONE NONE 500 1000	419 269 269 269	975 785 700 650	3.5 2.4 2.4 2.4	1300 890 800 750	4.1 2.4 2.4 2.4	1575 1125 1050 975	6.3 4.3 3.8 3.4	- - - -	1800 1350 1275 1200	8.0 6.5 6.5 6.3	AS ABOVE
P-51D (V-1650-7)	8000 8700 9400 10100 10600 11100	- 1830 2120 2430 2650 2950	250 2620 2800 2970 -	100 104 108 112 -	1550 1700 1830 1970 -	30000 25000 20000 15000 10000 5000	1750 2130 2530 3175 387	11.2 10.1 7.5 5.4 3.6 1.8	1750 2180 2500 3200 3580 398	140 140 140 140 140 140	1750 2180 2500 3200 3580 398	11.2 10.1 7.5 5.4 3.6 1.8	11100 10100 10600 11100	NONE NONE 500 1000	419 269 269 269	975 785 700 650	3.5 2.4 2.4 2.4	1300 890 800 750	4.1 2.4 2.4 2.4	1575 1125 1050 975	6.3 4.3 3.8 3.4	- - - -	1850 1250 1225 1175	8.7 5.7 5.7 5.6	AS ABOVE

NOTES:

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

* FOR COMPARATIVE PURPOSES ONLY.



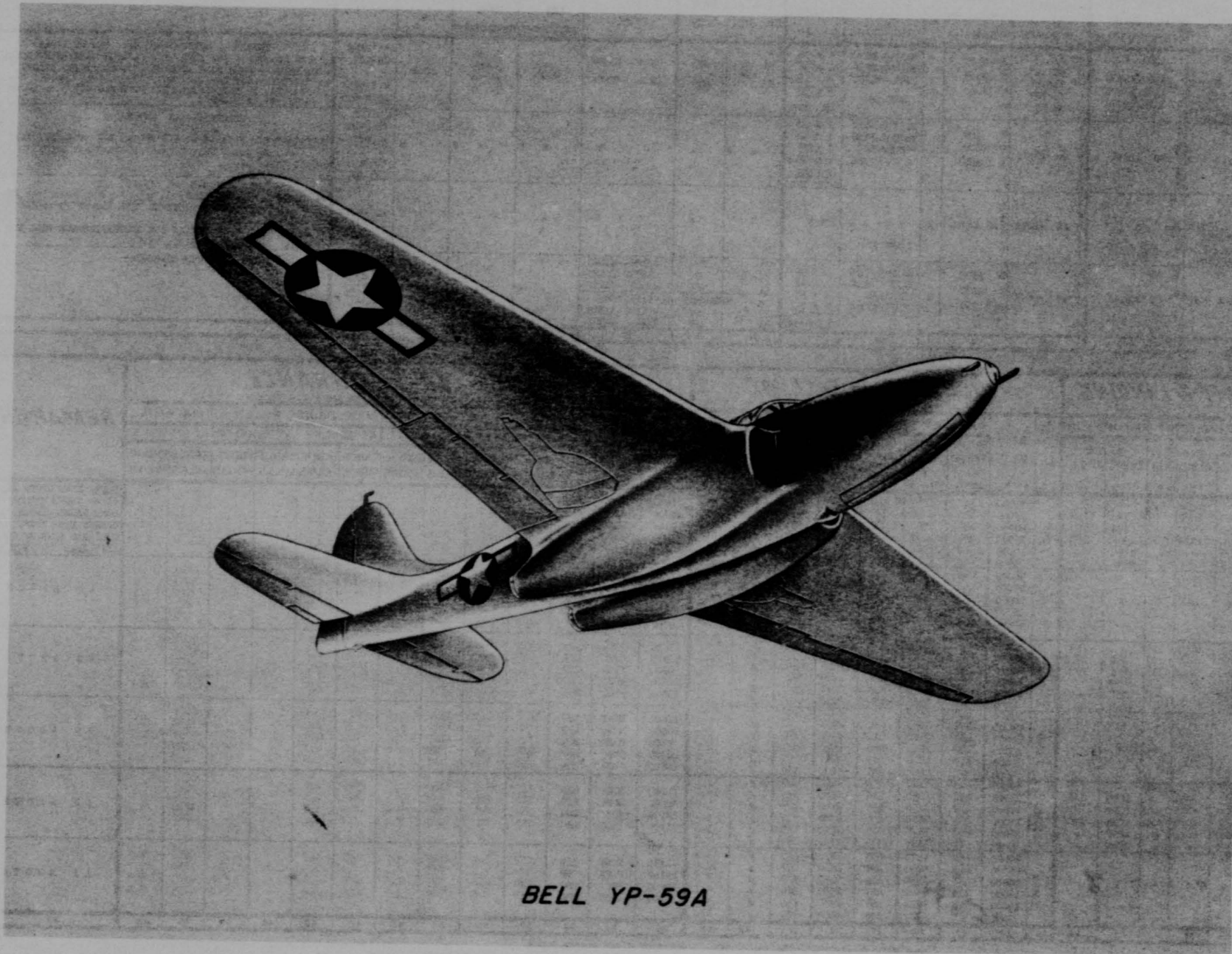
MANUFACTURED BY NORTH AMERICAN (Inglewood) "NA" & NORTH AMERICAN (Dallas) "NT"

CONFIDENTIAL

THIS PAGE IS UNCLASSIFIED

THIS PAGE IS UNCLASSIFIED

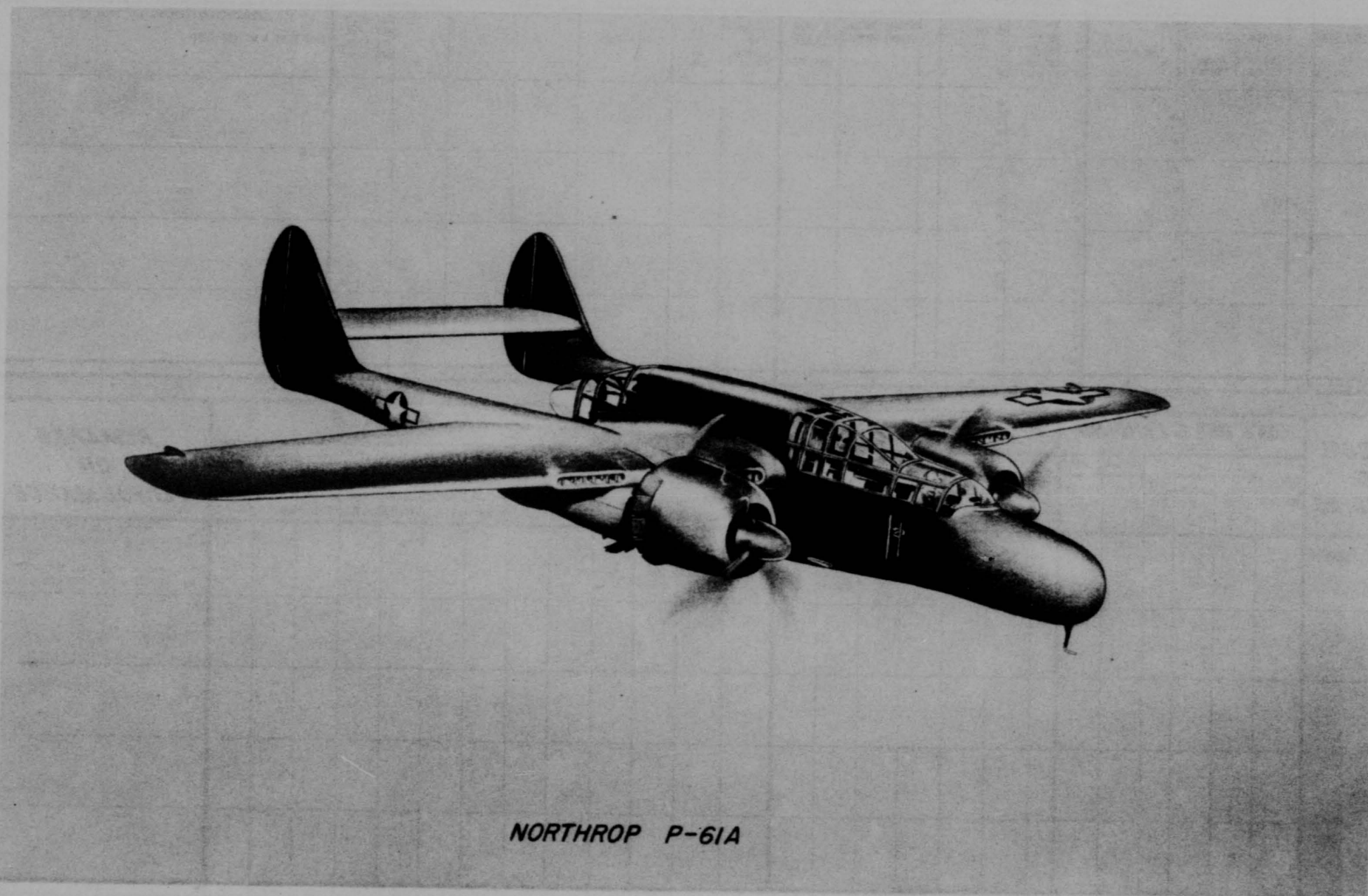
CONFIDENTIAL



CONFIDENTIAL

THIS PAGE IS UNCLASSIFIED

CONFIDENTIAL

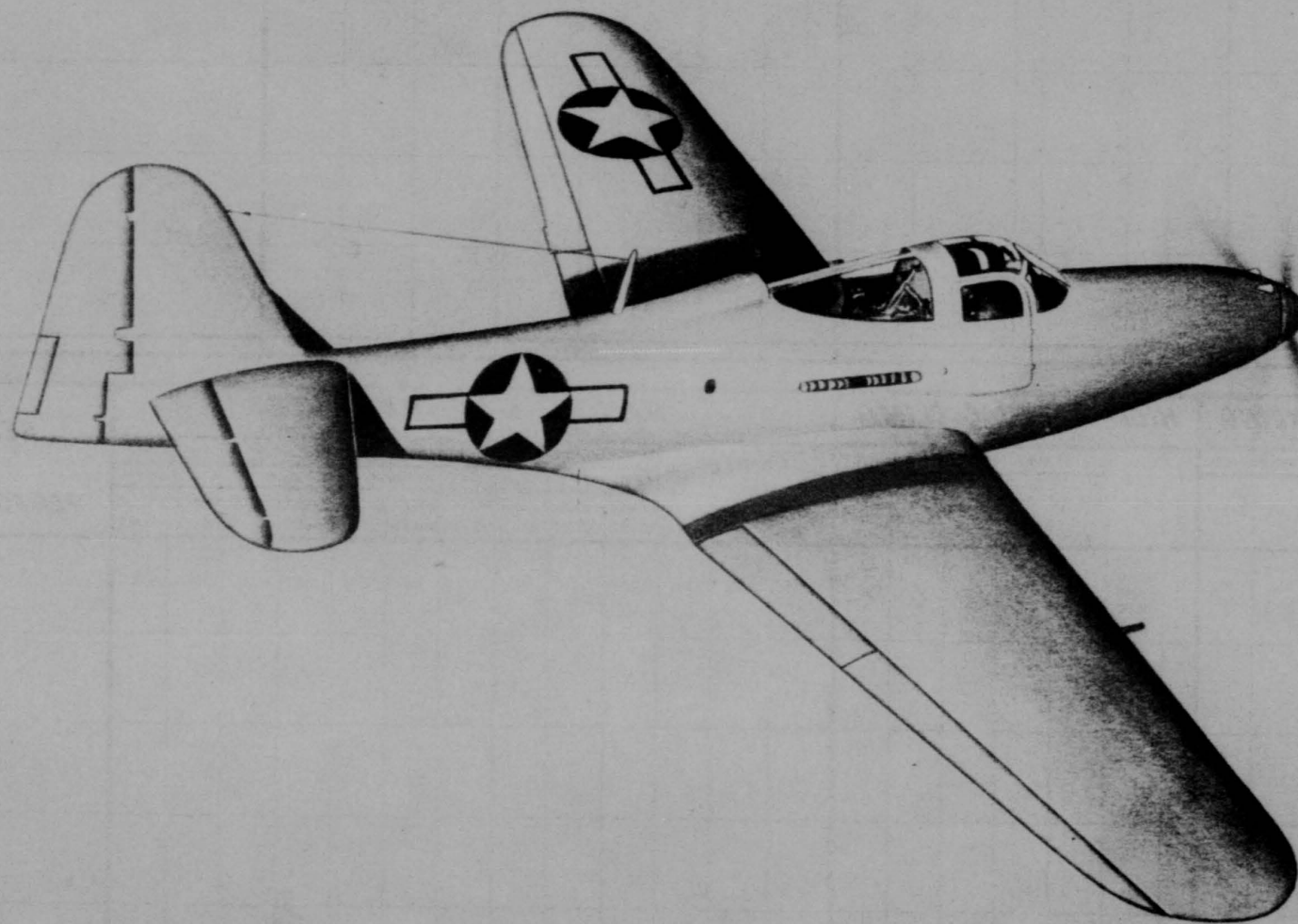


NORTHROP P-61A

CONFIDENTIAL

THIS PAGE IS UNCLASSIFIED

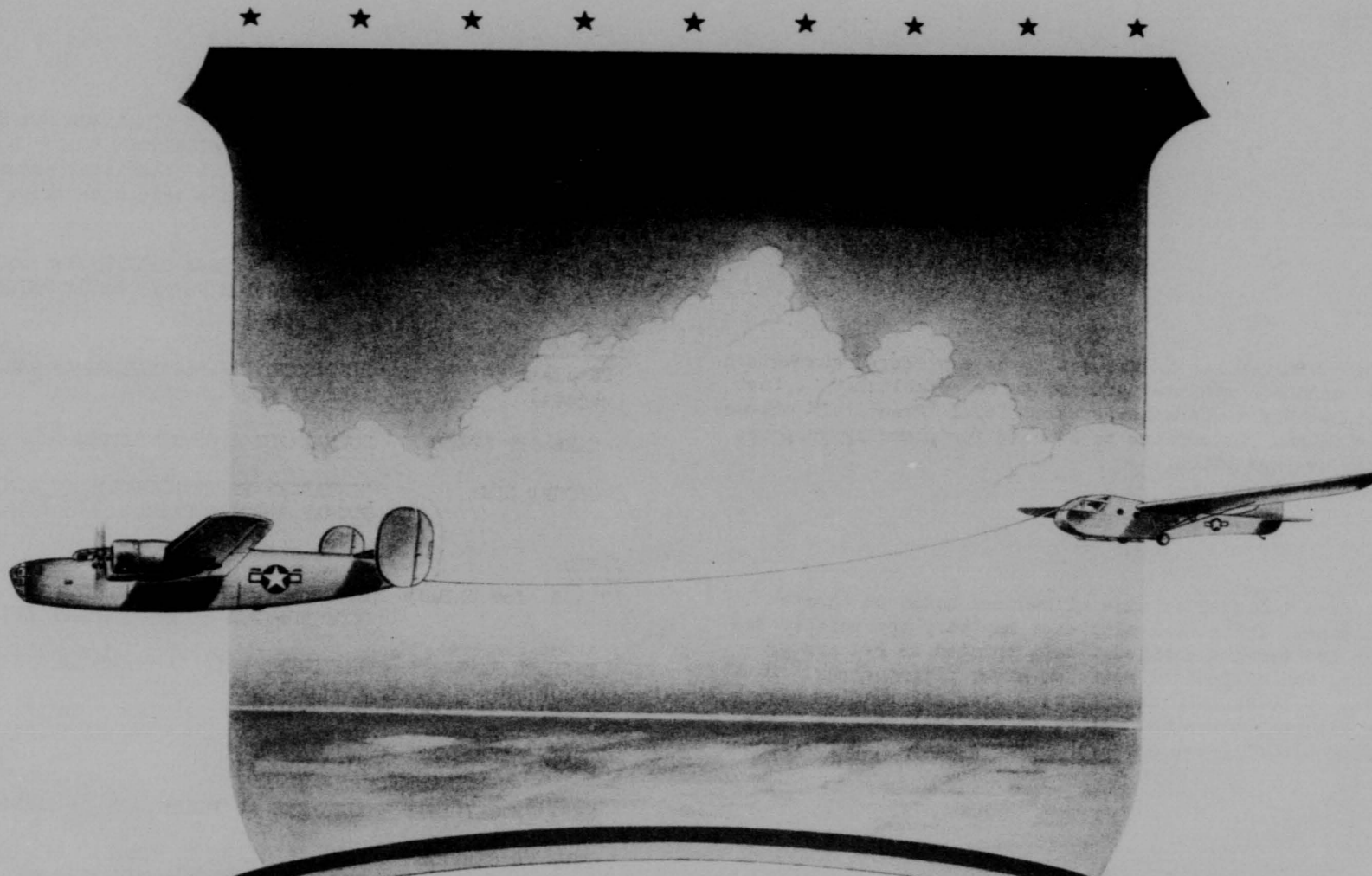
CONFIDENTIAL



BELL P-63A

CONFIDENTIAL

THIS PAGE IS UNCLASSIFIED



**GLIDER AND
TOWPLANE SECTION**

1-MAY-1944

THIS PAGE IS UNCLASSIFIED

CONFIDENTIAL

42

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

CONFIDENTIAL

THIS PAGE IS UNCLASSIFIED

CONFIDENTIAL

TOWPLANE & GLIDER TACTICAL PLANNING PERFORMANCE CHART

PAGE 43
AS OF:
20 APR. 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			MAX. TOW SPEED (M.P.H.)	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)									RADIUS (MI.)	TIME OUT (HRS)	TIME BACK (HRS)		RANGE (MI.)		ENDUR. (HRS.)
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18		19
B-17F & (1) CG-4A	7500	3800	59100	NONE	2780	150	6150	110	4150	135	300	12000*	37	(994	7.2	6.8	5000	1380	10.3	* LIMITED- NO OXYGEN IN GLIDER
														(980	6.8	6.3	10000	1370	9.6	
B-17F & (2) CG-4A	7500	3800	52500	NONE	1700	150	6000	110	4100	135	300	11000	57	510	3.8	3.5	5000	720	5.5	
	7500	3800	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	4225	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	5075	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

NOTES:

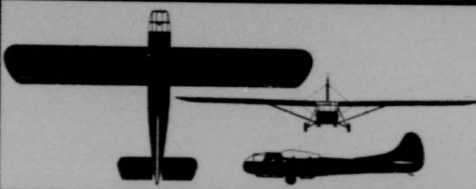
- (1) REFERENCE MATERIAL FROM TECHNICAL ORDER 01-1-143 dated 1 DEC. 1943.
- (2) ALL PERFORMANCE SHOWN WITH GLIDER TRAINING GEAR ATTACHED.

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

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

TOW PLANE PERFORMANCE WITH CG-4A TO BE SAME AS WITH CG-1A.

GLIDER CHARACTERISTICS

WEIGHT	GLIDER CHARACTERISTICS	SIZE
B-BASIC		S- SPAN
C-COMBAT		L- LENGTH
W-WAR MAX.		H- HEIGHT
		T- TREAD
		W- WING AREA
	TYPICAL GLIDER CAPACITIES	
B- (3700 to 4500)	(a) TROOP CARRIER: CREW(2) & TROOPS(13).	S- 53'8"
C- 7500	(b) CARGO CARRIER: CREW(2) & TROOPS(4) & JEEP CAR(1).	L- 48'4"
W- 9000	(c) CARGO CARRIER: CREW(2) & TROOPS(3) & 75MM. HOWITZER(1) & 75MM. AMMUNITION(18 RDS.)	H- 12'7"
		T- 9'1/2"
		W- (Tact. gear) 852 SQ. FT.

CONFIDENTIAL

THIS PAGE IS UNCLASSIFIED

CONFIDENTIAL

TOWPLANE & GLIDER TACTICAL PLANNING PERFORMANCE CHART

PAGE 45
AS OP: 20 APR. 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				MAX. TOW SPEED (M.P.H.)	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.)	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.)	(MI.)	(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	7050	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	8950	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	7500	4.1	330	2.9	2.4	5000	475	4.0		

COLUMN— 1

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.

B- (3700 to 4500)
C- 7500
W- 9000



SIZE

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

TYPICAL GLIDER CAPACITIES

- (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- 9'4"
W- (Tact. gear) 852 SQ. FT.

CONFIDENTIAL

