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M1092-9

EE-393

TACTICAL PLANNING

Characteristics & Performance Chart

FOR
REDEPLOYMENT
DATA

See

BOMB

CARGO

FIGHT

GLIDE

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PUBLISHED BY AUTHORITY OF THE COMMANDING GENERAL
ARMY AIR FORCES, AIR TECHNICAL SERVICE COMMAND
WRIGHT FIELD, DAYTON, OHIO

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DOD DIR 5200.9, 27 Sep 58

Attention
LAST ISSUE CONTAINING
EARLY TACTICAL MODELS

JUNE - 1945

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EE-393

PRACTICAL MANNING

Characteristics & Performance Chart

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FOREWORD

This chart is a supplement to the Semi-Annual Chart of Engineering Characteristics and Performance, EE-306-1, "Production". This issue covers typical models now in theater operation and is kept up to date as new models are received by the A.A.F.

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 Army-Navy Aeronautical specification AN-H-8a; "Handbooks, Pilot's Flight Operating Instructions" which sets forth specific allowances for practical service operation. Take off and landing distances are 125% of optimum at 3000 ft. 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, "War Maximum" weights are based on limiting applied positive maneuver factor of 2.00G unless otherwise specified. Time to climb is minimum within published engine limits. 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 for 10% net ideal range and endurance 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.)

THIS REPORT SUPERSEDES PREVIOUS EE-393 PUBLICATIONS; SUPERSEDED PUBLICATIONS, IF NO LONGER OFFICIALLY REQUIRED, WILL BE DESTROYED IN THE MANNER PRESCRIBED IN A.R.380-5.

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26 MAY 1945

MODEL & BLOCK NO.	ENGINE				PROPELLER		SIZE				WEIGHT		COMBAT CREW	FUEL TANK TYPE OR LOCATION NO. OF TANKS & CAPACITY	GUNS CAL. / ROS. / TYPE ROCKET INS.	BOMBS NO. & SIZE (INTER.) NO. & SIZE (EXT.)	CARGO STATION CAPACITY MAX. LOAD	RADIO	REMARKS & REF.	PERFORM		FOOT NOTES	SILHOUETTES	MODEL & BLOCK NO.		
	ENGINE MFR.	MODEL	SUPERCHARGER	TAKE-OFF H. P.	WAR EMERG. / ALT.	MILITARY / ALT.	CONTINUOUS / ALT.	PROP. MFR.	PROP. DIA.	NO. OF BLADES	PROP. TYPE	SPAN								LENGTH	HEIGHT				TREAD	WING AREA
B-17																									B-17	
B-24																										B-24
B-29																										B-29
B-32																										B-32
B-25																										B-25
B-26																										B-26
A-20																										A-20
A-26																										A-26
A-36																										A-36
CARGO																										A-36
P-38																										CARGO
P-39(20-30 INCL) OTHER P-39's																										P-38
P-40																										P-40
P-47M & N OTHER P-47's																										P-39(20-30 INCL) OTHER P-39's
P-51																										P-40
P-51H																										P-47M & N OTHER P-47's
P-61																										P-51
P-63																										P-51H
P-60																										P-61
CG-4A CG-13																										P-63
CG-15																										P-60
																										CG-4A CG-13
																										CG-15

NOTES

1. ONLY A-20J & K COMBAT CREWS ARE RESTRICTED, OTHER A-20'S ARE UNCLASSIFIED.
2. ONLY A-20H & J GUNS ARE RESTRICTED, OTHER A-20'S ARE UNCLASSIFIED.
3. ONLY B-29B IS CONFIDENTIAL, OTHER B-29'S ARE RESTRICTED.

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(Page 2 & 44)...FOREWORD
 (Page 5 & 44)...DEFINITIONS
 (Page 11)...B-29 SAMPLE MISSION
 (Page 25)...B-32 SKETCH
 (Page 12)...B-29 ARM. PAGE
 (Page 42b)...FIGHTER COMBAT RADIO ACTION

THE SECURITY CLASSIFICATION SHOWN ABOVE IS SPECIFICALLY FOR THE MATERIAL GIVEN IN THIS PUBLICATION.
 EACH DOCUMENT SHOULD BE GRADED ACCORDING TO ITS OWN CONTENT AND NOT NECESSARILY ACCORDING TO ITS RELATIONSHIP TO ANOTHER DOCUMENT (PARAGRAPH 9, AR 380-5)

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DEFINITIONS

CHARACTERISTICS		PERFORMANCE	
SUPERCHARGER:	"TURBO" indicates exhaust driven turbine with single speed integral diffuser.	BOMBS:	Maximum rack capacity for standard sizes.
BHP/ALT:	Brake horsepower per engine at critical altitude with ram.	CARGO:	Cargo, passenger or troop capacities.
T:	Maximum power for take off.	Max. load:	One size only on each bomb rack (in some cases a reduction in fuel load is required)
M:	Military power for combat at altitude shown, (usually limited to 15 min. duration)	TAKE OFF & LANDING:	Practical total cargo based on gross weight.
WE:	War emergency power for combat at altitude shown, (limited to 5 min. duration only)	(At 3000' runway alt.)	Values are at least 125% of optimum.
C:	Maximum power for continuous operation.	Gross weight:	Arbitrary values for reference only.
Note:	Maximum cruise power is the maximum power for unlimited operation with lean mixture.	(To clear 50')	Distances representative of minimum airport requirements.
SIZE:	Approximate dimensions for storage planning.	Ground run:	Distances representative of minimum runway requirements.
Length:	Does not include protruding guns.	Landing speed:	Practical minimum for average pilot.
Height:	Maximum in three point position.	HIGH SPEED & CLIMB:	Values are for clean new airplanes.
Wing area:	Standard aerodynamic surface area.	Military power:	For limited periods of combat operation.
Tread:	Center to center main wheels: (outboard if dual).	War emergency power:	(Performance with War Emergency ratings are shown when applicable).
WEIGHTS:	Approximate averages for planning purposes.	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.
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.	RANGE & ENDURANCE:	See discussion in "FOREWORD", page 2
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.	Take off weight:	Brief list of typical gross weights.
W:	War maximum weight for special missions, limited by structural considerations, based on a positive maneuver factor of 2.0 unless otherwise noted. Wing tanks must be full.	Bombs, etc:	Typical loadings combined with various tank capacities. No consideration is given to loadings requiring partially filled tanks.
M	Recommended max. landing as established in Tech. Order 01-1B-44. (10 March 1945)	Note:	Take off weights with corresponding load and fuel quantity applies to all values to the right on the same line.
FUEL & OIL	Standard fuel tankage and capacities as well as max. oil.	Max. cont. power:	High speed cruising with rich mixture. (For emergency cruising only)
ARMAMENT:	Resume' of information in the "ARMAMENT & BOMB INSTALLATIONS" (Chart EE-306A)	Max. cruise power:	Maximum continuous operation with lean mixture setting.
RADIO	Resume' of typical models that may be installed.	Long range:	Practical maximum range for planning purposes under all conditions set forth.
		RED PRINT:	Preliminary estimates or calculated data.

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BOEING (SEATTLE) "BO"

MODEL F BLOCK-NO.	ARMAMENT			BOMBS			FUEL U.S. GAL. (MAXIMUM)
	NO GUNS & CALIBER	RDS. PER GUN	LOCATION & TYPE	INTERNAL NO & SIZE	EXTERNAL NO & SIZE	MAX. LOAD LB.	
B-17F-BO (-1 thru -27)	1-.30 2-.50 2-.50 2-.50	500 a 300 400 500	NOSE...FLEX. SIDE WAIST-FL. UPPER TURRET LOW BALL TRR. TAIL...FLEX.MT.	2-2000 6-1600 6-1000 12- 500 16- 250 24- 100	NONE	9600	2550
B-17F-BO (-30 thru -50)	NONE 1) 2) .50 2) 2)	NONE 300 b 300 400 500 565	NOSE...FLEX. RADIO COMPART. SIDE WAIST-FL. UPPER TURRET LOW BALL TRR. TAIL...FLEX.MT.	2-2000 6-1600 6-1000 12- 500 16- 250 24- 100	2-1400 2-2000 2-1600 2-1000	6-1600 2-1400x	AS ABOVE
B-17F-BO -55 thru 1st.30(-65)	2) 1) 2) .50 2) 2)	300 300 300 400 500 565	NOSE...FLEX. RADIO COMPART. SIDE WAIST-FL. UPPER TURRET LOW BALL TRR. TAIL...FLEX.MT.	A S	A B O V E		2550 (-55 thru -75) 3630 -80 & SUB.
B-17F-BO Last 70(-85) thru -130	3) 1) 2) .50 2) 2)	300 300 300 400 500 565	NOSE...FLEX. RADIO COMPART. SIDE WAIST-FL. UPPER TURRET LOW BALL TRR. TAIL...FLEX.MT.	AS ABOVE EXCEPT THAT EXTERNAL BOMB RACKS DELETED AFTER 15th.(-95)			3630
B-17G-BO (-1 thru -110)	2) 1) 2) .50 2) 2)	Not 610 365 300 c 500 d 400 500 565 e	CHEEK...FLEX. CHIN TURRET RADIO COMPART. SIDE WAIST-FL. UPPER TURRET LOW BALL TRR. TAIL...FLEX.MT.	2-2000 6-1600 6-1000 12- 500 16- 250 24- 100	MOUNT LUGS & CONTROLS RETAINED	9600	AS ABOVE

NOTES: a NOSE GUN DELETED LAST 35(-27). d EARLY MODELS CARRY 300 RDS./GUN.
b RADIO COMPART.GUN ADDED AFTER 16th(-30). e CHEYENNE TAIL MOUNT ON LAST 20(-90)
c RADIO COMP.GUN DELETED LAST 62(-105&-110). AND SUBSEQUENT. x EXTERNAL.

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DOUGLAS (LONG BEACH) "DL"

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MODEL E BLOCK-NO.	ARMAMENT			BOMBS			FUEL U.S. GAL. (MAXIMUM)
	NO GUNS & CALIBER	RDS. PER GUN	LOCATION & TYPE	INTERNAL NO & SIZE	EXTERNAL NO & SIZE	MAX. LOAD LB.	
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 TRR. TAIL...FLEX.MT.	2-2000 6-1600 6-1000 12- 500 16- 250 24- 100	NONE	9600	2550
B-17F-DL Last 12(-10) thru -20	2) 1) 2) .50 2) 2)	300 300 300 400 500 565	NOSE...FLEX. RADIO COMPART. SIDE WAIST-FL. UPPER TURRET LOW BALL TRR. TAIL...FLEX.MT.	AS ABOVE	PROV. FOR EXTERNAL RACKS ON -20 & SUB.		AS ABOVE AS ABOVE
B-17F-DL -25 thru 1st.21(-35)	A S	A B O V E	AS ABOVE	PROV. FOR EXTERNAL RACKS	AS ABOVE		3630
B-17F-DL Last 19(-35) thru -65	3) 1) 2) .50 2) 2)	500 *500 500 400 500 565	NOSE...FLEX. RADIO COMPART. SIDE WAIST-FL. UPPER TURRET LOW BALL TRR. TAIL...FLEX.MT.	A S	A B O V E		AS ABOVE
B-17G-DL (-1 thru -85)	2) 1) 2) .50 2) 2)	Not 610 365 300 c 500 d 400 500 565 e	CHEEK...FLEX. CHIN TURRET RADIO COMPART. SIDE WAIST-FL. UPPER TURRET LOW BALL TRR. TAIL...FLEX.MT.	AS ABOVE EXCEPT ONLY MOUNT- ING LUGS & CONTROLS RETAINED FOR EXTERNAL BOMBS ON (-80) & SUBSEQUENT MODELS.			AS ABOVE

NOTES: a NO NOSE GUN ON 1st.13(-10). d EARLY MODELS CARRY 300 RDS./GUN.
b NOT CARRIED ON -1 & -5. e CHEYENNE TAIL MOUNT ON (-50) & SUBSQT.
c RADIO COMPART.GUN DELETED (-75) & SUBSQT. x EXTERNAL.

GENERAL NOTE:

THE 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.

VEGA (BURBANK) "VE"

MODEL E BLOCK-NO.	ARMAMENT			BOMBS			FUEL U.S. GAL. (MAXIMUM)
	NO GUNS & CALIBER	RDS. PER GUN	LOCATION & TYPE	INTERNAL NO & SIZE	EXTERNAL NO & SIZE	MAX. LOAD LB.	
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.		NOSE GUN	2-2000 6-1600 6-1000 12- 500 16- 250 24- 100	NONE	9600	2550
B-17F-VE (-15 & -20)	2) 1) 2) .50 2) 2)	300 300 300 400 500 565	NOSE...FLEX. RADIO COMPART. SIDE WAIST-FL. UPPER TURRET LOW BALL TRR. TAIL...FLEX.MT.	AS ABOVE	EXTERNAL RACKS ON Last 31 (-20) & SUB.	AS ABOVE	AS ABOVE
B-17F-VE (-25 & -30)	A S	A B O V E	AS ABOVE	b 2-1400 2-2000 2-1600 2-1000		6-1600 2-1400x 17600	2550 (B-17F-25) 3630 (B-17F-30)
B-17F-VE (-35 thru -50)	3) 1) 2) .50 2) 2)	300 300 300 400 500 565	NOSE...FLEX. RADIO COMPART. SIDE WAIST-FL. UPPER TURRET LOW BALL TRR. TAIL...FLEX.MT.	AS ABOVE EXCEPT ONLY MOUNT- ING LUGS & CONTROLS RETAINED FOR EXTERNAL BOMB RACKS ON (-35) & SUBSEQUENT MODELS.			3630
B-17G-VE (-1 thru -110)	2) 1) 2) .50 2) 2)	Not 610 365 300 e 500 d 400 500 565 c	CHEEK...FLEX. CHIN TURRET RADIO COMPART. SIDE WAIST-FL. UPPER TURRET LOW BALL TRR. TAIL...FLEX.MT.	A S	A B O V E		

NOTES: a NOT ON (-1) & (-5). d EARLY MODELS CARRIED 300 RDS./GUN.
b EXTERNAL RACKS DELETED LAST 4(-30); e RADIO GUN STORED (-35) thru 1st.16(-35);
LUGS & CONTROLS RETAINED. c RADIO GUN DELETED LAST 24(-35) & SUBSQT.
c CHEYENNE TAIL MOUNT ON LAST 14(-15) & SUBSQT. x EXTERNAL.

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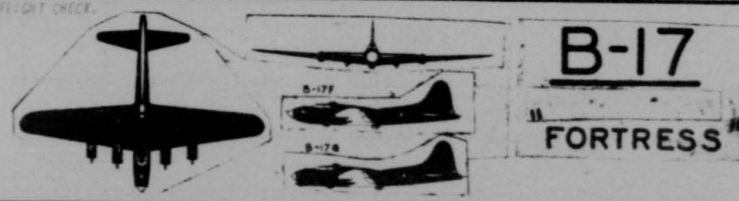
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TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART																	
MODEL & BLOCK-NO.	ENGINE & PROP.		SIZE		WEIGHT		COMBAT CREW	FUEL & OIL		ARMAMENT			BOMBS		RADIO	REMARKS & REFERENCE	
	NUMBER	ENGINE MFGH. MODEL SUPERCHARGER PROP. MFGH. TYPE	B.H.P./ALT.		S-SPAN L-LENGTH H-HEIGHT T-TREAD W-WING AREA	B-BASIC C-COMBAT W-WAR MAX. M-MAX LAND		NOTES	FUEL TANKAGE		ROCKETS-SIZES-INSTALLATION			NO. AND SIZE			TYPICAL MODELS CARRIED
			T-TAKE OFF W-WAR EMERG. M-MILITARY C-CONTINUOUS	T-TAKE OFF W-WAR EMERG. M-MILITARY C-CONTINUOUS					TYPE OR LOCATION ALSO (MAX OIL)	NO AND CAPACITY (MAX FUEL)	NO GUNS AND SIZE	RDS PER GUN	LOCATION AND TYPE	INTERNAL	EXTERNAL		
B-17F (LATEST MODEL)	4	WRIGHT 8-1820-97 TURBO HAMILTON STD. 111770) 2 BL. F.F., HYDRA-MATIC	T 1200/3 L W 1360/25000 M 1200/27000 C 1000/30000	S 103'9" L 74'9" H 19'1" T 21'2" W 1420 Sq.	B 38000 C 55000 W 72000 M 50000	10	MAIN - WINGS 8-1730 WING TIPS 2 x 540 BOMB BAY 2 x 410 (144) (3630)	21 300 23 300 25 300 27 500 29 500 31 500	ROCKET - FLEEL. SIDE WAIST-FLEX. RADIO COMPART. UPPER TURRET LOW BALL TURRET TAIL-FLEX.MOUNT	2-2000 2-2000 2-1800 2-1800 12- 900 16- 250 (SOME MODELS) 24- 100	SEE NOTE (A)	REFER TO PAGE 2 FOR "FOREWORD" REFER TO PAGE 3 FOR SECURITY CLASSIFICATION REFER TO PAGE 5 FOR DEFINITIONS. REFER TO T.O. LISTED FOR DETAILED PLANNING					
B-17G (LATEST MODEL)	4	AS ABOVE	T 1200/3 L W 1380/26700 M 1200/32700 C 1000/35200	S 103'9" L 74'9" H 19'1" T 21'2" W 1420 Sq.	AS ABOVE	10	AS ABOVE EXCEPT PROVISIONS ONLY FOR THE BOMB BAY FUEL TANKS.	21 300 23 300 25 300 27 500 29 500 31 500	CHEEK - FLEX. CHIN TURRET SIDE WAIST-FLEX. UPPER TURRET LOW BALL TURRET CHEYENNE TAIL MT.	AS ABOVE	9600	AS ABOVE					

MODEL & BLOCK-NO.	TAKE OFF & LANDING HARD SURFACE - NO WIND				HIGH SPEED & CLIMB CLEAN AIRPLANE AT NORMAL COMBAT WEIGHT						RANGE AND 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		LOADING		MAX. CONTINUOUS POWER		MAX. CRUISE POWER		LONG RANGE							
		LB	TO. FT.	LAND DIST. FT.	LANDING SPEED MPH		TO. FT.	LAND DIST. 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.	TAKE OFF WEIGHT LB	BOMBS (LBS)	TOTAL FUEL (U.S. GAL)	RANGE MILES	ENDUR. HOURS		RANGE MILES	ENDUR. HOURS	RANGE MILES	ENDUR. HOURS	RANGE MILES
B-17F	40000	-	3700	90	-	2000	30000	110	300	298	900	280	225	52.0	55500	NONE	3530	-	-	-	-	-	-	-	3100 ^g	21.2 ^h
B-17G	45000	-	3500	85	-	1900	25000	80	300	287	850	265	210	54.0	50500	NONE	2810	-	-	-	-	-	-	-	2550	19.4

NOTES: (A) EARLIER MODEL... (B) MILITARY POWER AVAILABLE FOR 5 MINUTES ONLY.



B-17 FORTRESS

MANUFACTURED BY BOEING - DOUGLAS - VEGA

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CONSOLIDATED (SAN DIEGO) "CO"

MODEL & BLOCK-NO.	ARMAMENT			BOMBS			FUEL U.S. GAL. (MAXIMUM)
	NO GUNS & CALIBER	RDS. PER GUN	LOCATION & TYPE	INTERNAL NO & SIZE	EXTERNAL NO & SIZE	MAX. LOAD LB.	
B-24D-CO 3 thru 1st. 94(-15)	1) 2) .50 2)	200 400 600	NOSE.....FLEX. UPPER TURRET TAIL TURRET	4-2000 8-1000 12- 500 12- 250 20- 100	NONE	8000	2364
B-24D-CO Last 36(-15) thru -20	1) 2) .50 2)	200 400 100 500	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) .50 1) 2)	100 250 400 500	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) .50 2) 2)	100 250 400 508 600	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 -210) B-24J-CO (-1 thru -20) B-24M-CO (-1 thru -50)	2) 2) .50 2) 2)	600 250 ^b 400 508 600	NOSE TURRET SIDE WAIST..FL. UPPER TURRET LOW BALL TRR. See "a"	A S	A B O V E		AS ABOVE

NOTES: a B-24J's HAVE TAIL TURRET; B-24L's HAVE HAND HELD GUNS IN TAIL & NOT ON B-24J-25
b B-24M's HAVE LIGHT WEIGHT TAIL TURRET.
c B-24M's INCREASE TO 500 RDS/GUN ON -210.

CONSOLIDATED (FT. WORTH) "CP"

MODEL & BLOCK-NO.	ARMAMENT			BOMBS			FUEL U.S. GAL. (MAXIMUM)
	NO GUNS & CALIBER	RDS. PER GUN	LOCATION & TYPE	INTERNAL NO & SIZE	EXTERNAL NO & SIZE	MAX. LOAD LB.	
B-24D-CF (-1 & -5)	3) 2) .50 2) 2)	100 250 400 600	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 -105) B-24J-CF (-1 thru -15)	2) 2) .50 2) 2)	600 250 400 508 600	NOSE TURRET SIDE WAIST..FL. UPPER TURRET LOW BALL TRR. TAIL TURRET	A S	A B O V E (SEE a)		AS ABOVE
B-24J-CF (-20 thru -30)	2) 2) .50 2) 2)	600 500 ^b 400 508 600	NOSE TURRET S. WAIST-85 MT. UPPER TURRET LOW BALL TRR. TAIL TURRET	A S	A B O V E		AS ABOVE
B-24J-CF (-40)	A S	A B O V E					

NOTES: a B-24J-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.
b B-24J-20 HAS PROVISIONS FOR ONLY 250 RDS. PER GUN AT SIDE WAIST POSITION.

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AS OF:
26 MAY 1945

DOUGLAS (Tulsa) "DT" & FORD (Willow Run) "FO"

MODEL & BLOCK-NO.	ARMAMENT			BOMBS			FUEL U.S. GAL. (MAXIMUM)
	NO GUNS & CALIBER	RDS. PER GUN	LOCATION & TYPE	INTERNAL NO & SIZE	EXTERNAL NO & SIZE	MAX. LOAD LB.	
B-24E-DT & FO (-1 thru -15)	2) 2) .50 2) 2)	600 250 400 508 600	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-DT & FO (-20 thru -30)	2) 2) .50 2) 2)	600 500 ^b 400 508 600	NOSE TURRET S. WAIST-85 MT. UPPER TURRET LOW BALL TRR. TAIL TURRET	A S	A B O V E		
B-24J-DT (-1 thru -10) B-24J-FO (-1 thru -20)	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.						
B-24J-FO (-1 thru -20) B-24M-FO (-1 thru -15)	2) 2) .50 2) 2)	600 500 400 508 600	NOSE TURRET S. WAIST-85 MT. UPPER TURRET LOW BALL TRR. TAIL-HAND HELD	4-2000 8-1600 8-1000 12- 500 12- 250 20- 100	NONE	12800	3614

NOTES: a B-24E-20'S HAVE PROVISIONS FOR ONLY 250 ROUNDS PER GUN.
b B-24E-20'S HAVE PROVISIONS FOR ONLY 250 ROUNDS PER GUN.

NORTH AMERICAN (DALLAS) "MT"

MODEL & BLOCK-NO.	ARMAMENT			BOMBS			FUEL U.S. GAL. (MAXIMUM)
	NO GUNS & CALIBER	RDS. PER GUN	LOCATION & TYPE	INTERNAL NO & SIZE	EXTERNAL NO & SIZE	MAX. LOAD LB.	
B-24G-MT (-1 thru -5)	3) 2) .50 2) 2)	250 TOT. 250 400 508 600	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-24J-MT (-1 thru -5)	2) 2) .50 2) 2)	600 250 400 508 600	NOSE TURRET SIDE WAIST..FL. UPPER TURRET LOW BALL TRR. TAIL TURRET	A S	A B O V E		AS ABOVE
B-24J-MT (-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-MT (-1 & -5)	A S	A B O V E					

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

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TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART																			
MODEL & BLOCK-NO.		ENGINE & PROP.			SIZE		WEIGHT		COMBAT CREW	FUEL & OIL		ARMAMENT			BOMBS			RADIO	REMARKS & REFERENCE
NUMBER	ENGINE MFR. MODEL SUPERCHARGER PROP. MFR. TYPE	B.H.P./ALT.		S-SPAN L-LENGTH H-HEIGHT T-TREAD W-WING AREA	B-BASIC C-COMBAT W-WAR MAX. M-MAX LAND	NOTES	FUEL TANKAGE	NO. AND CAPACITY ALSO (MAX OIL) (MAX FUEL)		NO. GUNS AND SIZE	RDS PER GUN	LOCATION AND TYPE	NO. AND SIZE		INTERNAL	EXTERNAL	MAX. LOAD	TYPICAL MODELS CARRIED	
B-24D (LATEST MODEL)	PRATT-WHITNEY R-1830-43 or -65 TURBO HAMILTON STD. 11"7"DIA.-3 BL. F. F., HYDROMATIC	T 1200/5 L W NONE M 1200/26500 C 1100/27000	S 110'0" L 56'4" H 16'10" T 25'8" W 1048 Sq. ft.	B 37000 C 56000 W 71200 * M 56000	10		MAIN - WINGS 12-2354 MIN. TIPS 2 x 255 2 x 400 2 x 500 (132)	20 20 20 20	100 250 400 508 600		HOSE - FLEX. SIDE WAIST - FL. UPPER TURRET LOW-RALL TURRET TAIL TURRET	4-2000 8-1600 8-1000 12- 600 12- 250 20- 100	ONLY MOUNTING LUGS & CONTROLS INSTALLED	12800	SEE NOTE (A)				REFER TO PAGE 2 FOR "FOREWORD" REFER TO PAGE 3 FOR SECURITY CLASSIFICATION REFER TO PAGE 5 FOR DEFINITIONS. REFER TO T.O. LISTED FOR DETAILED PLANNING.
B-24G, H & J (LATEST MODEL)	AS ABOVE	T 1200/5 L W NONE M 1200/31800 ^a C 1100/31900 ^a	S 110'0" L 57'2" H 18'0" T 25'8" W 1048 Sq. ft.	B 36000 C 56000 W 71200 * M 56000	10		AS ABOVE	20 20 20 20	700 ^b 500 400 550 600		HOSE TURRET SIDE WAIST - FL. UPPER TURRET LOW-RALL TURRET TAIL TURRET	AS ABOVE	AS ABOVE	AS ABOVE					B-24D TECHNICAL ORDER 01-SEC-1 (REV. 25 DEC. 1944) B-24G, H, J, L & M TECH. ORDER 01-SEC-1 (REV. 30 JAN. 1945) (A) EARLY B-24D, H & J's HAD CRITICAL ALTITUDE AS LISTED FOR B-24D. (B) ARMAMENT SHOWN FOR LATEST B-24D-FD. SEE PAGE OPPOSITE FOR DETAILED BREAKDOWN.
B-24L & M (LATEST MODEL)	PRATT-WHITNEY R-1830-65 TURBO HAMILTON STD. 11"7"DIA.-3 BL. F. F., HYDROMATIC	T 1200/5 L W NONE M 1200/31800 ^a C 1100/31900 ^a	S 110'0" L 57'2" H 18'0" T 25'8" W 1048 Sq. ft.	B 27500 C 56000 W 71200 * M 56000	10		AS ABOVE EXCEPT: B-24L HAS HAND HELD FLEX. TAIL GUNS. B-24M HAS LIGHT WEIGHT TAIL TURRET.	20 20 20 20	AS ABOVE EXCEPT: B-24L HAS HAND HELD FLEX. TAIL GUNS. B-24M HAS LIGHT WEIGHT TAIL TURRET.		AS ABOVE EXCEPT: B-24L HAS HAND HELD FLEX. TAIL GUNS. B-24M HAS LIGHT WEIGHT TAIL TURRET.	AS ABOVE	AS ABOVE	AS ABOVE					
COLUMN		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

MODEL & BLOCK-NO.	TAKE OFF & LANDING HARD SURFACE - NO WIND					HIGH SPEED & CLIMB CLEAN AIRPLANE AT NORMAL COMBAT WEIGHT								RANGE AND ENDURANCE STATUTE AIR MILES - NO WIND - NO ALLOWANCE FOR RESERVE										REMARKS							
	GROSS WEIGHT LB.	TO CLEAR 50'		LANDING SPEED MPH	GROUND RUN		STD. ALT. FT.	WAR EMERG.		MIL. POWER		MAX. CONTIN. POWER		LOADING			MAX. CONTINUOUS POWER				LONG RANGE										
		T.O. DIST.	LAND DIST.		T.O. DIST.	LAND DIST.		HIGH SPEED	RATE OF CLIMB	HIGH SPEED	RATE OF CLIMB	HIGH SPEED	RATE OF CLIMB	TIME TO CLIMB	TAKE OFF WEIGHT	BOMBS CARBO. BASS.	TOTAL FUEL	at 10000 FT.		at 25000 FT.		at 10000 FT.									
		FT.	FT.		FT.	FT.		MPH	FT/MIN.	MPH	FT/MIN.	MPH	FT/MIN.	MIN.	LB.	LB.	U.S. GAL.	RANGE	ENDUR.	RANGE	ENDUR.	RANGE	ENDUR.		RANGE	ENDUR.					
B-24D	40000 45000 50000 55000 60000 65000	- 3900 4800 6400 9100	3300 3800 3900 4300 4400 5600	100 100 100 100 100 100	2800 3000 3300 3500 4000 5000	30000 25000 20000 15000 10000 5000	NONE	303 290 277 263 252	900 1000 1150 1200 1200	297 284 272 258 246	700 800 950 1000 1050	30.2 22.0 15.4 9.7 6.2	54000 61000 61500 61500	NONE NONE 3000 5000	3514 3154 2814 2354	2514 2154 1814 1354	1200 1050 850	4.8 4.7 3.5	1350 1200 950	4.8 4.1 3.5	2400 2050 1750	10.9 9.5 8.0	2500 2200 1800	10.4 9.2 7.5	3000 2750 2300	12.0 11.0 11.0	(c) MAX. FERRY RANGE MAY BE RESTRICTED BY INSUFFICIENT OIL IF ENGINE IS NOT IN BETTER THAN AVERAGE CONDITION. OIL CONSUMPTION IS 3 QT. TO 3 GAL PER HOUR DEPENDING ON TIME SINCE OVERHAUL.				
B-24G, H & J	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	30000 25000 20000 15000 10000 5000	NONE	290 277 254 244	975 975 875 825	278 267 256 245	450 500 725 850	32.5 25.0 17.5 11.4 8.3	51000 62500 61500	NONE NONE 3000 5000	3514 3154 2814 2354	2514 2154 1814 1354	1200 1000 850	4.8 4.7 3.5	1350 1200 950	4.8 4.1 3.5	2200 1900 1500	10.7 9.5 7.9	2300 1950 1700	10.2 8.8 7.3	2900 2500 2100	11.6 11.0 11.7					
B-24L & M	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	30000 25000 20000 15000 10000 5000	NONE	290 277 254 244	975 975 875 825	278 267 256 245	450 500 725 850	32.5 25.0 17.5 11.4 8.3	51000 62500 61500	NONE NONE 3000 5000	3514 3154 2814 2354	2514 2154 1814 1354	1200 1000 850	4.8 4.7 3.5	1350 1200 950	4.8 4.1 3.5	1500 1700	7.9 7.3	2100	11.7							
COLUMN		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	46	47	48

NOTES:

(A)

TABLE NO.	NAME	LETTER
10-10-1	WING AREA	W
10-10-2	WING SPAN	S
10-10-3	WING TIP	T
10-10-4	WING TREAD	T
10-10-5	WING AREA	W
10-10-6	WING AREA	W
10-10-7	WING AREA	W
10-10-8	WING AREA	W
10-10-9	WING AREA	W
10-10-10	WING AREA	W
10-10-11	WING AREA	W
10-10-12	WING AREA	W
10-10-13	WING AREA	W
10-10-14	WING AREA	W
10-10-15	WING AREA	W
10-10-16	WING AREA	W
10-10-17	WING AREA	W
10-10-18	WING AREA	W
10-10-19	WING AREA	W
10-10-20	WING AREA	W
10-10-21	WING AREA	W
10-10-22	WING AREA	W
10-10-23	WING AREA	W
10-10-24	WING AREA	W
10-10-25	WING AREA	W
10-10-26	WING AREA	W
10-10-27	WING AREA	W
10-10-28	WING AREA	W
10-10-29	WING AREA	W
10-10-30	WING AREA	W
10-10-31	WING AREA	W
10-10-32	WING AREA	W
10-10-33	WING AREA	W
10-10-34	WING AREA	W
10-10-35	WING AREA	W
10-10-36	WING AREA	W
10-10-37	WING AREA	W
10-10-38	WING AREA	W
10-10-39	WING AREA	W
10-10-40	WING AREA	W
10-10-41	WING AREA	W
10-10-42	WING AREA	W
10-10-43	WING AREA	W
10-10-44	WING AREA	W
10-10-45	WING AREA	W
10-10-46	WING AREA	W
10-10-47	WING AREA	W
10-10-48	WING AREA	W

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



B-24
"LIBERATOR"

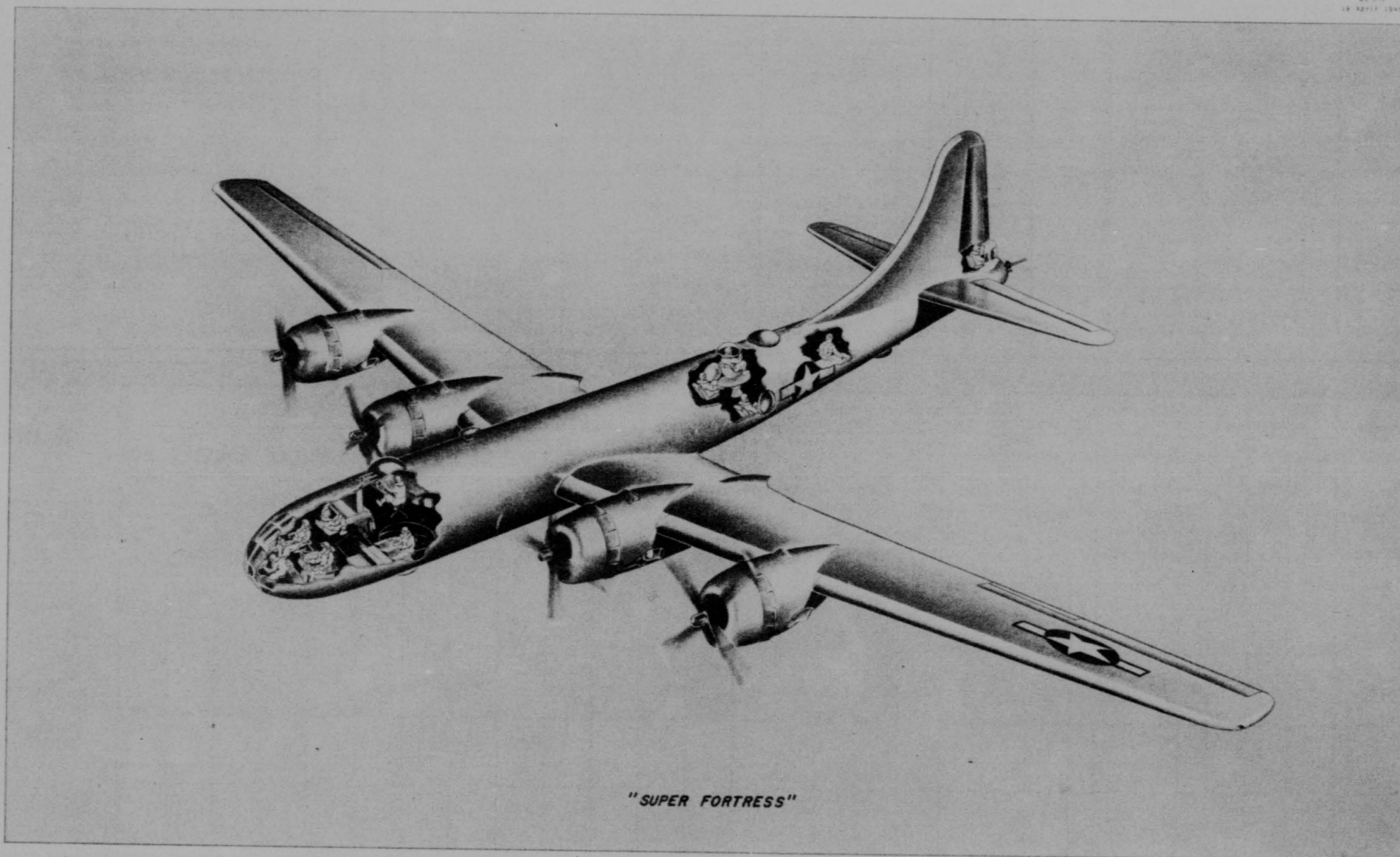
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PAGE 10
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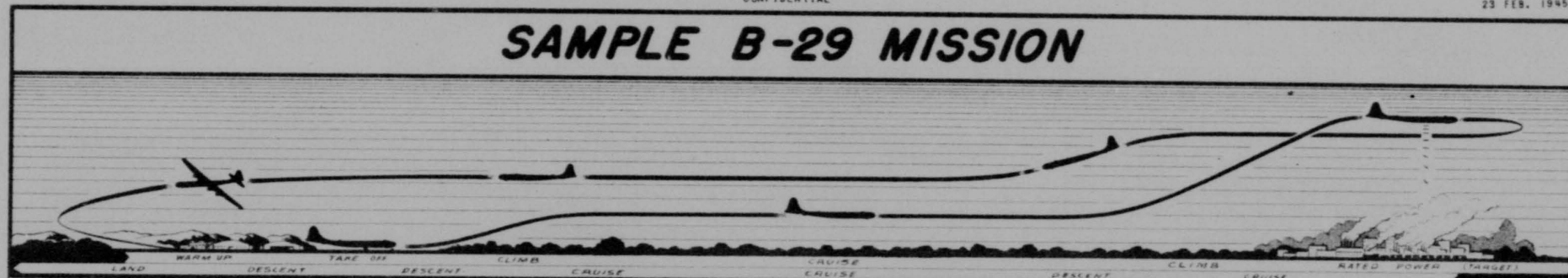


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PAGE 11
AS OF:
23 FEB. 1945**SAMPLE B-29 MISSION**

	DENSITY ALTITUDE	COWL FLAP	INDICATED AIR SPEED	FUEL USED	TIME IN FLIGHT	AIR MILES
WARM UP AND TAKE OFF	0 TO 100	WIDE OPEN TO 2"	0-180	160	0	0
CLIMB	100 TO 5000	2"	195	320	0.2	32
CRUISE	5000	.62"	207	2637	6.2	1316
CLIMB	5000 TO 30000	2"	195	3557	7.1	1566
RATED POWER (TARGET AREA)	30000	1½"	228	4000	7.5	1720
CRUISE	30000	1½"	189	4364	8.3	1970
CRUISE DESCENT	30000 TO 15000	1"	188	5030	10.3	2490
CRUISE	15000	1"	186	6170	14.0	3326
DESCENT AND LAND	15000 TO 0	.62"	183	-6400	15.3	3570

NOTE

A. THE ABOVE DATA IS BASED ON STANDARD TEMPERATURE. THE B-29 IS GREATLY AFFECTED BY TEMPERATURE CHANGES AND A VARIATION IN PERFORMANCE OF AS MUCH AS 20% MAY BE EXPECTED UNDER CERTAIN CONDITIONS OF WIND AND TEMPERATURE. FOR EXAMPLE, A 1°C. CHANGE IN TEMPERATURE HAS APPROXIMATELY THE SAME EFFECT ON SERVICE CEILING AS 1000 LB. IN WEIGHT.

D. ABOVE DATA FOR COMBAT B-29 WITH TURRETS, BLISTERS, RADAR DOME, SHORT COWL FLAPS AND LATEST ENGINE BAFFLES.

T.O. GROSS WT.—135000 LB.
FUEL—6923 GAL.
BOMBS—12000 LB.
RADIUS OF ACTION 1700 MI
(WITH 523 GAL. RESERVE)

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PAGE 12
AS OF:
26 MAY 1965

BOEING (ATLANTA) "BA"

MODEL & BLOCK NO.	ARMAMENT			FUEL		
	NO GUNS & CALIBER	RDS PER GUN	LOCATION & TYPE	TANK TYPE OR LOCATION	NO. TANKS & CAPACITY	MAX. CAPACITY (U. S. GALS)
B-29-BA -1	1-20MM. 2) 2) .50 2) 2) 2)	100 1000* 1000* 1000* 1000*	TAIL, MC, TYPE B UPPER FORE TRK. UPPER REAR TRK. LOWER FORE TRK. LOWER REAR TRK. TAIL POWER MT.	OUTBD. WINGS INBD. WINGS BOMB BAY	11-2726 8-2912 4x 640	8198
B-29-BA -5 thru 1st.9 (-15)	A S	A B O V E		OUTBD. WINGS INBD. WINGS CENTER WING BOMB BAY	11-2726 8-2912 4-1350 4x 640	9548
B-29-BA last 11 (-15) thru (-20)	1-20MM. 4) 2) .50 2) 2) 2)	100 875* 1000* 1000* 1000* 1000*	TAIL, MC, TYPE B UPPER FORE TRK. UPPER REAR TRK. LOWER FORE TRK. LOWER REAR TRK. TAIL POWER MT.	A S	A B O V E	
B-29-BA -25 thru -40	4) 2) 2) .50 2) 2)	875* 1000* 1000* 1000* 1000*	UPPER FORE TRK. UPPER REAR TRK. LOWER FORE TRK. LOWER REAR TRK. TAIL POWER MT.	A S	A B O V E	
B-29B-BA	2-.50	1000*	POWER TAIL MT.	A S	A B O V E	

NOTES: * FILLER STRIPS MAY BE ADDED IN AMMUNITION
CANS TO REDUCE ROUNDS TO 500 PER GUN.

BOEING (BENTON) "BH"

MODEL & BLOCK NO.	ARMAMENT			FUEL		
	NO GUNS & CALIBER	RDS PER GUN	LOCATION & TYPE	TANK TYPE OR LOCATION	NO. TANKS & CAPACITY	MAX. CAPACITY (U. S. GALS)
B-29A-BH -1	1-20MM. 2) 2) 2) 2) 2)	100 1000* 1000* 1000* 1000* 1000*	TAIL, MC, TYPE B UPPER FORE TRK. UPPER REAR TRK. LOWER FORE TRK. LOWER REAR TRK. TAIL POWER MT.	OUTBD. WINGS INBD. WINGS BOMB BAY	11-2726 8-2912 4x 640	8198
B-29A-BH -5 thru 1st.11 (-10)	A S	A B O V E		OUTBD. WINGS INBD. WINGS CENTER WING BOMB BAY	11-2726 8-2912 3-1100 4x 640	7378
B-29A-BH last 9 (-10) thru (-15)	2) 2) .50 2) 2)	1000* 1000* 1000* 1000*	UPPER FORE TRK. UPPER REAR TRK. LOWER FORE TRK. LOWER REAR TRK. TAIL POWER MT.	A S	A B O V E	
B-29A-BH -20 & -30	4) 2) 2) .50 2) 2)	875* 1000* 1000* 1000* 1000*	UPPER FORE TRK. UPPER REAR TRK. LOWER FORE TRK. LOWER REAR TRK. POWER TAIL MT.	A S	A B O V E	

NOTES: * FILLER STRIPS MAY BE ADDED IN AMMUNITION
CANS TO REDUCE ROUNDS TO 500 PER GUN.

BOEING (WICHITA) "BW"

MODEL & BLOCK NO.	ARMAMENT			FUEL		
	NO GUNS & CALIBER	RDS PER GUN	LOCATION & TYPE	TANK TYPE OR LOCATION	NO. TANKS & CAPACITY	MAX. CAPACITY (U. S. GALS)
B-29-BW -1 thru -20	1-20MM. 2) 2) .50 2) 2) 2)	100 1000* 1000* 1000* 1000* 1000*	TAIL, MC, TYPE B UPPER FORE TRK. UPPER REAR TRK. LOWER FORE TRK. LOWER REAR TRK. TAIL POWER MT.	OUTBD. WINGS INBD. WINGS BOMB BAY	11-2726 8-2912 4x 640	8198
B-29-BW -25 thru 1st.25 (-40)	A S	A B O V E		OUTBD. WINGS INBD. WINGS CENTER WING BOMB BAY	11-2726 8-2912 4-1350 4x 640	9548
B-29-BW last 75 (-40) thru 1st.80 (-50)	1-20MM. 4) 2) .50 2) 2) 2)	100 875* 1000* 1000* 1000* 1000*	TAIL, MC, TYPE B UPPER FORE TRK. UPPER REAR TRK. LOWER FORE TRK. LOWER REAR TRK. TAIL POWER MT.	A S	A B O V E	
B-29-BW last 20 (-50) thru (-65)	4) 2) 2) .50 2) 2)	875* 1000* 1000* 1000* 1000*	UPPER FORE TRK. UPPER REAR TRK. LOWER FORE TRK. LOWER REAR TRK. TAIL POWER MT.	A S	A B O V E	

NOTES: * FILLER STRIPS MAY BE ADDED IN AMMUNITION
CANS TO REDUCE ROUNDS TO 500 PER GUN.

MARTIN (OHARA) "MO"

MODEL & BLOCK NO.	ARMAMENT			FUEL		
	NO GUNS & CALIBER	RDS PER GUN	LOCATION & TYPE	TANK TYPE OR LOCATION	NO. TANKS & CAPACITY	MAX. CAPACITY (U. S. GALS)
B-29-MO -1 thru 1st.9 (-20)	1-20MM. 4) 2) .50 2) 2) 2)	100 875* 1000* 1000* 1000* 1000*	TAIL, MC, TYPE B UPPER FORE TRK. UPPER REAR TRK. LOWER FORE TRK. LOWER REAR TRK. TAIL POWER MT.	OUTBD. WINGS INBD. WINGS CENTER WING BOMB BAY	11-2726 8-2912 4-1350 4x 640	9548
B-29-MO last 19 (-20) thru (-35)	4) 2) 2) .50 2) 2)	875* 1000* 1000* 1000* 1000*	UPPER FORE TRK. UPPER REAR TRK. LOWER FORE TRK. LOWER REAR TRK. TAIL POWER MT.	A S	A B O V E	

NOTES: * FILLER STRIPS MAY BE ADDED IN AMMUNITION
CANS TO REDUCE ROUNDS TO 500 PER GUN.

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TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART																		
MODEL & BLOCK-NO.	ENGINE & PROP.		SIZE		WEIGHT		COMBAT CREW	FUEL & OIL		ARMAMENT			BOMBS		RADIO	REMARKS & REFERENCE		
	NUMBER	ENGINE MFR. MODEL SUPERCHARGER PROP MFR. TYPE	B.H.P./ALT.		S-SPAN L-LENGTH H-HEIGHT T-TREAD W-WING AREA	B-BASIC G-COMBAT W-WAR MAX M-MAX LAND		NOTES	FUEL TANKAGE		NO. ROCKETS-SIZE-INSTALLATION			NO. AND SIZE		TYPICAL MODELS CARRIED	MAX. LOAD	
			T-TAKE OFF W-WAR EMERG. M-MILITARY C-CONTINUOUS	T-TAKE OFF W-WAR EMERG. M-MILITARY C-CONTINUOUS					TYPE OR LOCATION ALSO (MAX. OIL)	NO. AND CAPACITY ALSO (MAX. FUEL)	NO. GUNS AND SIZE	RDS PER GUN	LOCATION AND TYPE	INTERNAL	EXTERNAL			
B-29 & A (LATEST MODEL)	4	WRIGHT R-3350-23, -23A, -41, -57 or -58 TURBO HAMILTON STD. 16" 7" DIA. -4 BL. F.F., HYDROMATIC	T 2200/5 L W 2500/ - M 2200/25000 C 2000/25000	S 141' 3" L 99' H 29' 7" T 31' 6" W 1736 Sq. Ft.	B 75000 C 120000 W 138000 M 120000	11 12	OUTRD.-WINGS 14-2725 INRD.-WINGS 8-2512 CENTER-WINGS 4-1350 BOMB BAY 4-640 (1948)	4) 4 2) 2 2) 50 2) 2	500 500 500 500	UPPER FORE TRG. UPPER REAR TRG. LOWER FORE TRG. LOWER REAR TRG. TAIL POWER HT.	5-4000 8-2000 12-1600 12-1000 90-500		20000	SEE NOTE (A)				
B-29B (LATEST MODEL)	4	AS ABOVE	AS ABOVE	AS ABOVE	B 75000 C 120000 W 138000 M 120000	10	AS ABOVE	3-50	500	TAIL POWER HT.	AS ABOVE			AS ABOVE				

REFER TO PAGE 2 FOR "FOREWORD"
REFER TO PAGE 3 FOR SECURITY CLASSIFICATION
REFER TO PAGE 5 FOR DEFINITIONS
REFER TO T.O. LISTED FOR DETAILED PLANNING.

B-29, A & B TECH. ORDER 01-20EJ-1 (REV. 20 MAY 1945)

(a) WAR EMERGENCY RATING WILL NOT BE USED UNLESS ALL FOUR ENGINES ARE R-3350-23A, -57 or -58.
(b) RATINGS GIVEN WITHOUT RAM.
(c) OUTBOARD TREAD 31' 6"; INBOARD TREAD 29' 5".
(d) SEE PAGE OPPOSITE FOR ARMAMENT BREAKDOWN.
* MAJORITY OF B-29A'S HAVE 250 GAL. LESS MAX. FUEL CAPACITY BECAUSE OF DIFFERENT INTERNAL WING STRUCTURE. SEE PAGE OPPOSITE FOR FUEL TANKAGE OF INDIVIDUAL BLOCKS.
UNUSABLE FUEL MAY BECOME APPRECIABLE ON ALL B-29'S AT CERTAIN ANGLES. SEE TECH ORDER FOR DETAILS.

MODEL & BLOCK-NO.	TAKE OFF & LANDING HARD SURFACE-NO WIND						HIGH SPEED & CLIMB CLEAN AIRPLANE AT NORMAL COMBAT WEIGHT						RANGE AND ENDURANCE STATUTE AIR MILES-NO WIND-NO ALLOWANCE FOR RESERVE										REMARKS		
	GROSS WEIGHT LB.	TO CLEAR 50'		GROUND RUN		STD. ALT. FT.	WAR EMERG.		MIL. POWER		MAX. CONTIN. POWER		LOADING			MAX. CONTINUOUS POWER				LONG RANGE					
		T.O. DIST.	LAND DIST.	T.O. DIST.	LAND DIST.		HIGH SPEED	RATE OF CLIMB	HIGH SPEED	RATE OF CLIMB	HIGH SPEED	RATE OF CLIMB	TIME TO CLIMB	TAKE OFF WEIGHT	BOMBS	TOTAL FUEL	at 10000FT.		at 25000FT.		at 10000FT.				
		FT.	FT.	FT.	FT.		MPH	FT/MIN	MPH	FT/MIN	MPH	FT/MIN	MIN	LB.	LB.	U.S. GAL.	RANGE	ENDUR.	RANGE	ENDUR.	RANGE	ENDUR.			
B-29 & A	80000 90000 100000 110000 120000 135000	- - 4600 5700 7200 8900	- - - - - - 4400	- - 3100 3900 4900 - 8700	- - - - - - 3200	30000 25000 20000 15000 10000 5000	300 250 200 150 100 50	350 300 250 200 150 100	390 340 290 240 190 140	390 340 290 240 190 140	150 100 50 50 50 50	72.0 52.0 38.0 25.0 16.0 8.0	133000 135000 127000 120000 135000	4000 4000 4000 3000 2000	8288 8918 9638 5638 5638	1800 1800 1500 1450	6.0 5.9 4.9 4.9	1950 2000 1600 1550	6.0 6.0 4.8 4.8	2550 2550 2100 2050	9.5 9.4 7.7 7.6	2500 2650 2100 1950	8.7 8.9 7.2 6.9	4550 3700 3800 3200 2850	20.6 16.4 17.7 14.6 12.6
B-29B *						30000 20000 15000 10000 5000	300 200 150 100 50	350 300 250 200 150	390 340 290 240 190	150 100 50 50 50	72.0 52.0 38.0 25.0 16.0 8.0	122000 131000 135000 131000	4000 12000 4000 20000	8908 8988 9638 5638	1850 1850 1500	6.0 6.0 4.9	1950 1950 1550	6.0 6.0 4.8	2650 2600 2100	9.5 9.5 7.7	2650 2800 2100	8.9 8.7 7.0	3200 4000 3850 3100	24.2 17.8 17.1 13.7	

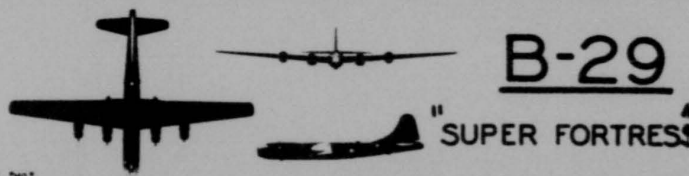
NOTES:

B-29 & A	B-29B	ENGINE
AR/AB-3	AR/AB-3	GAUGE PATH
AR/AB-4	AR/AB-4	LOCALIZER
AR/AB-5	AR/AB-5	MAGNETIC COMPASS
AR/AB-6	AR/AB-6	IFF
AR/AB-7	AR/AB-7	MARBLE BEACON
AR/AB-8	AR/AB-8	STILLPIONE
AR/AB-9	AR/AB-9	LIAISON
AR/AB-10	AR/AB-10	STATIC DISCHARGE
AR/AB-11	AR/AB-11	PAR. TRANSMITTER
AR/AB-12	AR/AB-12	LOGAN
AR/AB-13	AR/AB-13	IFF "TALL"
AR/AB-14	AR/AB-14	RAILER
AR/AB-15	AR/AB-15	IFF "TALL"

* PROVISIONS ONLY

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

MANUFACTURED BY BELL (ATLANTA) *BA*: HOEING (DENTON) *MB*: HOEING (MICHIGAN) *MM*: MARTIN (OHIO) *NO*



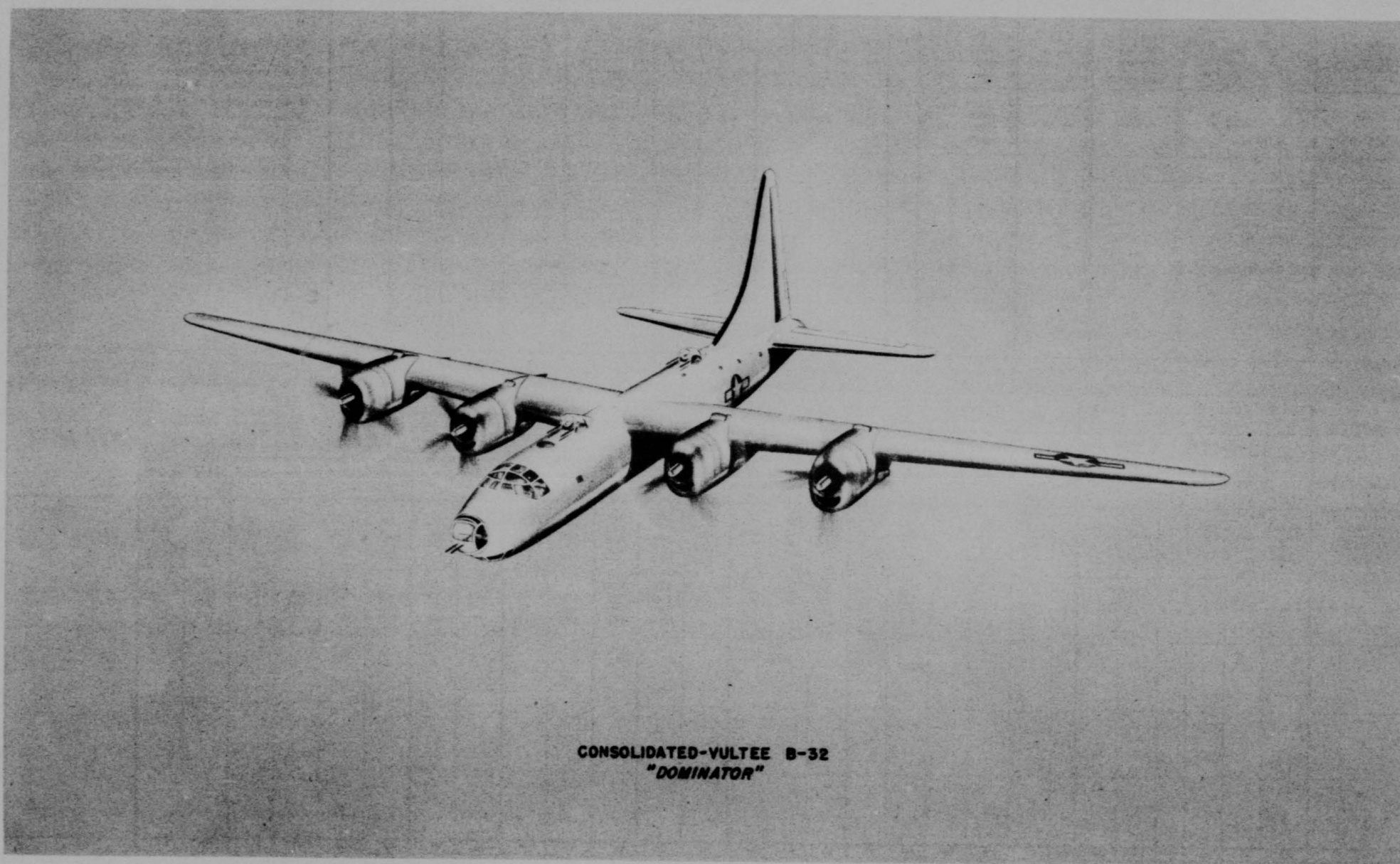
B-29
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AS 011
25 JAN. 1945



CONSOLIDATED-VULTEE B-32
"DOMINATOR"

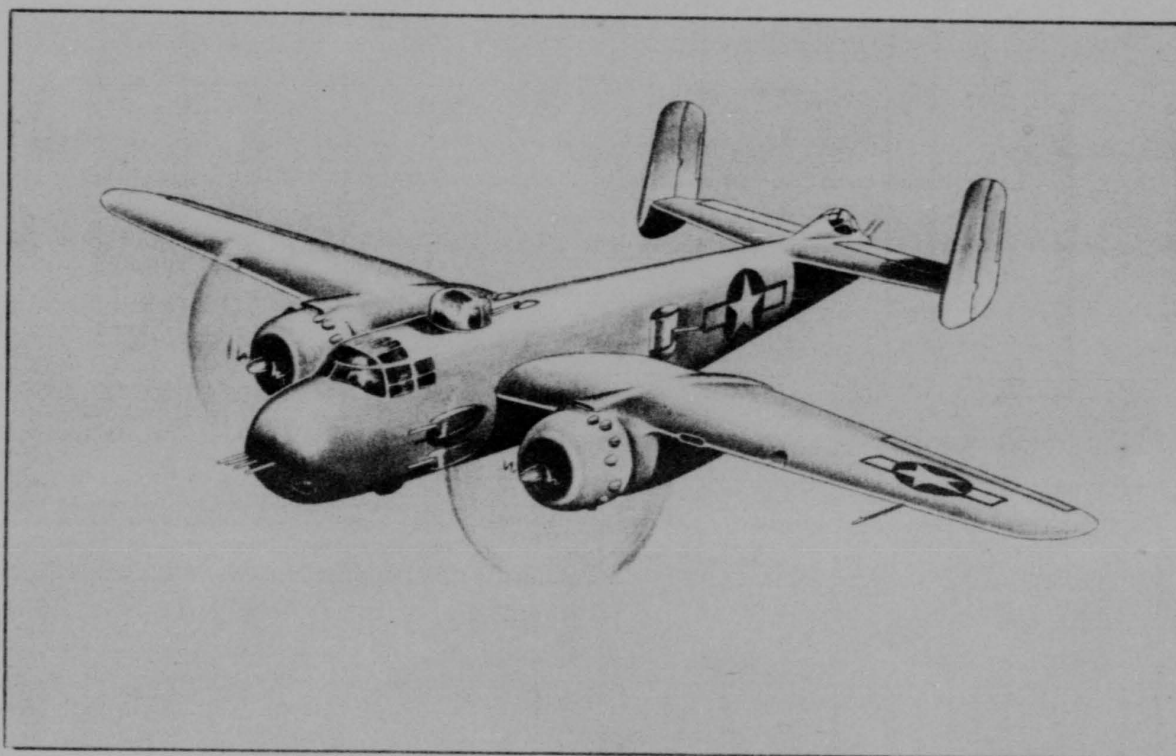
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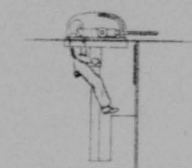
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AS OF:
25 JAN. 1945

B-25 MITCHELL BOMBER



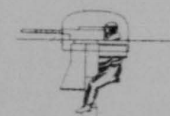
TAIL GUNNER
B-25H&J



UPPER TURRET (REAR)
B-25C, D, & G



CANNONEER
B-25G



UPPER TURRET (FRONT)
B-25H&J

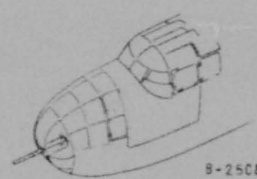


BOTTOM TURRET
B-25C, D, & G

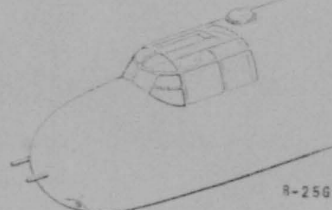


WAIST GUNNER
B-25H&J

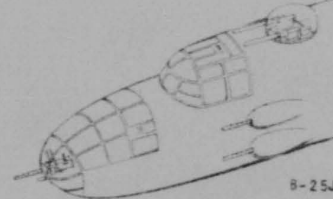
B-25H



B-25C, D, & G



B-25G



B-25J

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TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART

MODEL & BLOCK-NO.	ENGINE & PROP.		SIZE		WEIGHT		COMBAT CREW	FUEL & OIL		ARMAMENT			BOMBS		RADIO	REMARKS & REFERENCE	
	NUMBER	ENGINE MFOR. MODEL SUPERCHARGER PROP. MFOR. TYPE	B.H.P./ALT.	S-SPAN L-LENGTH H-HEIGHT T-TREAD W-WING AREA	B-BASIC C-COMBAT W-WAR EMERG. M-MILITARY C-CONTINUOUS	NOTES		FUEL TANKAGE		FNC-ROCKETS-SIZE-INSTALLATION			NO. AND SIZE				MAX. LOAD
								TYPE OR LOCATION (MAX. OIL)	NO. AND CAPACITY (MAX. FUEL)	NO. GUNS AND SIZE	RDS. PER GUN	LOCATION AND TYPE	INTERNAL	EXTERNAL			
B-25C-NA -1 thru -25	2	WRIGHT R-2600-13 or -25 2 SPD. SUPERCH. HAMILTON STD. 12" 7" DIA.-3 BL. F.F., HYDROMATIC	T 1700 / S L 1850 / S L 1800 / S L 1700 / 4500 / 1900 / 13000	S 37' 6" L 52' 11" H 19' 9" T 19' 4" W 610 Sq. Ft.	B 22000 C 33400 W 35000* M 32200		MAIN - WINGS 2 x 184 1/2 MAIN - WINGS 2 x 151 1/2 AUX. - WINGS 6 x 204 SIDE WAIST 1 x 125 BOMB BAY 1 x 585	1-75mm 21 400 400 350	NOSE - FLEX. NOSE - FIXED UPPER TURRET LOWER TURRET (SOME MODELS)	1-2000 2-1400 3-1000 4-500 8-250 12-100	1-2000 3-1500 6-325 8-250 8-100	3-1500 5200	SCA-211 SCA-269B SCA-274A SCA-287A SCA-522 SCA-535 SCA-578 SCA-595 SCA-695 M/AW-7 RC-82 RC-88 RC-108 RC-108 RC-198 RC-198	REFER TO PAGE 2 FOR "FOREWORD" REFER TO PAGE 3 FOR SECURITY CLASSIFICATION REFER TO PAGE 5 FOR DEFINITIONS REFER TO T.O. LISTED FOR DETAILED PLANNING			
B-25G-NA -1 thru -10	2	AS ABOVE	AS ABOVE	AS ABOVE	B 21700 C 33500 W 35000* M 32200		MAIN - WINGS 2 x 184 1/2 MAIN - WINGS 2 x 151 1/2 AUX. - WINGS 6 x 204 SIDE WAIST 1 x 125 BOMB BAY 2 - 500 1 x 585	1-75mm 21 400 400 350	NOSE - CANNON TURRET NOSE - FIXED UPPER TURRET LOWER TURRET (SOME MODELS)	1-2000 2-1600 3-1000 4-500 8-250 12-100	AS ABOVE	2200		(a) LENGTH B-25G = 13.53 FT. (b) B-25C-25 & D-20 THRU -35 HAVE SAME FUEL CAPACITY AS LISTED FOR B-25G. ONLY B-25D AIRPLANES CARRY 1 x 125 GAL. SIDE WAIST TANK. (c) B-25C-1 & D-1 CARRY ONLY 1-30 CAL. FLEX. NOSE GUN OF 600 ROUNDS IN PLACE OF 2 NOSE GUNS. (d) ARMOR PIERCING BOMBS ON SOME MODELS ONLY. (e) BOMB BAY FUEL CONSISTS OF EITHER 1 x 215 GAL. SELF SEALING REMOVABLE TANK & 1 x 335 GAL. METAL DROPPABLE TANK OR IN LIEU, 1 x 585 GAL. DROPPABLE METAL TANK. (f) SOME B-25H-1 MODELS CARRY ONLY 2 NOSE PACKAGE GUNS. (g) THE 2000 LB. STATION IS DELETED ON 131st. B-25H-5 AND SUBSEQUENT, ALSO 1st. 150 B-25J-1's. T TORPEDO X EXTERNAL			
B-25H-NA -1 thru -10	2	AS ABOVE	AS ABOVE	AS ABOVE	B 22000 C 33500 W 35000* M 32200		MAIN - WINGS 2 x 184 1/2 MAIN - WINGS 2 x 151 1/2 AUX. - WINGS 6 x 204 SIDE WAIST 2 x 50 BOMB BAY 2 - 500 1 x 585	1-75mm 21 400 400 350	NOSE - CANNON TURRET NOSE - PACKAGE SIDE WAIST - FL. UPPER TURRET TAIL POWER MT.	1-2000 2-1600 3-1000 4-500 8-250 12-100	AS ABOVE EXCEPT MOUNTING LUGS & CONTROLS FOR EXTERNAL WING BOMBS INSTALLED ON LAST 250 B-25H-10 AND SUBSEQUENT.						
B-25J-NC -1 thru -35	2	AS ABOVE	AS ABOVE	AS ABOVE	B 21700 C 33500 W 35000* M 32200		AS ABOVE	1-75mm 21 400 400 350	NOSE - FLEX. NOSE - FIXED SIDE WAIST - FL. UPPER TURRET TAIL POWER MT.	1-2000 2-1500 3-1000 4-500 8-250 12-100	AS ABOVE EXCEPT MOUNTING LUGS & CONTROLS FOR EXTERNAL WING BOMBS INSTALLED ON LAST 250 B-25J-10 AND SUBSEQUENT.						

MODEL & BLOCK-NO.	TAKE OFF & LANDING HARD SURFACE-NO WIND					HIGH SPEED & CLIMB CLEAN AIRPLANE AT NORMAL COMBAT WEIGHT							RANGE AND ENDURANCE STATUTE AIR MILES-NO WIND-NO ALLOWANCE FOR RESERVE										REMARKS			
	GROSS WEIGHT LB.	TO CLEAR 50'		LANDING SPEED MPH	GROUND RVM T.O. LAND DIST. FT.	STD. ALT. FT.	WAR EMERG.		MIL. POWER		MAX. CONTIN. POWER			LOADING		MAX. CONTINUOUS POWER		MAX. CRUISE POWER		LONG RANGE						
		T.O. DIST. FT.	LAND DIST. FT.				HIGH SPEED 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.	TAKE OFF WEIGHT LB.	BOMBS CARRIED LBS.	TOTAL FUEL U.S. GAL.	RANGE MILES	ENDUR. HOURS	RANGE MILES	ENDUR. HOURS	RANGE MILES	ENDUR. HOURS		RANGE MILES	ENDUR. HOURS	
B-25C-NA -1 thru -25	27000	3900	3500	180	1500	20000	255	250	250	250	250	250	250	250	250	250	1275	5.2	1450	5.7	2350	10.3	2175	10.0	2850	12.6
B-25D-NC -1 thru -35	30000	4000	3800	180	1700	15000	283	283	283	283	283	283	283	283	283	283	1275	4.7	1300	5.2	2200	9.4	1950	9.0	2500	11.8
B-25G-NA -1 thru -10	32000	4800	3900	180	1900	10000	282	282	282	282	282	282	282	282	282	282	1275	4.9	1350	5.7	1175	5.3	1175	5.3	1525	7.3
B-25H-NA -1 thru -10	35000	5000	4000	180	2000	5000	282	282	282	282	282	282	282	282	282	282	1275	3.0	ABOVE PRAC-	1250	5.5	ABOVE PRAC-	1350	7.1	1350	7.1
B-25J-NC -1 thru -35	33000	4500	3800	180	1800	15000	282	282	282	282	282	282	282	282	282	282	1275	2.9	ABOVE PRAC-	1100	5.0	ABOVE PRAC-	1225	6.1	1225	6.1

- NOTES:
- (a) SCA-211 FREQUENCY METER
 - SCA-269G RADIO COMPASS
 - SCA-274A COMMAND SET
 - SCA-287A LIAISON SET
 - SCA-522 COMMAND SET
 - SCA-535 SET
 - SCA-578 EMERGENCY TRANSMITTER
 - SCA-595 SET
 - SCA-695 SET
 - M/AW-7 RADIO COMPASS
 - RC-82 FILTER EQUIPMENT
 - RC-88 INTERPHONE AMPLIFIER
 - RC-108 MARKER BEACON
 - RC-108 LOCALIZER
 - RC-198 CONTACTOR UNIT
 - RC-198 FILTER EQUIPMENT

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



B-25
"MITCHELL"

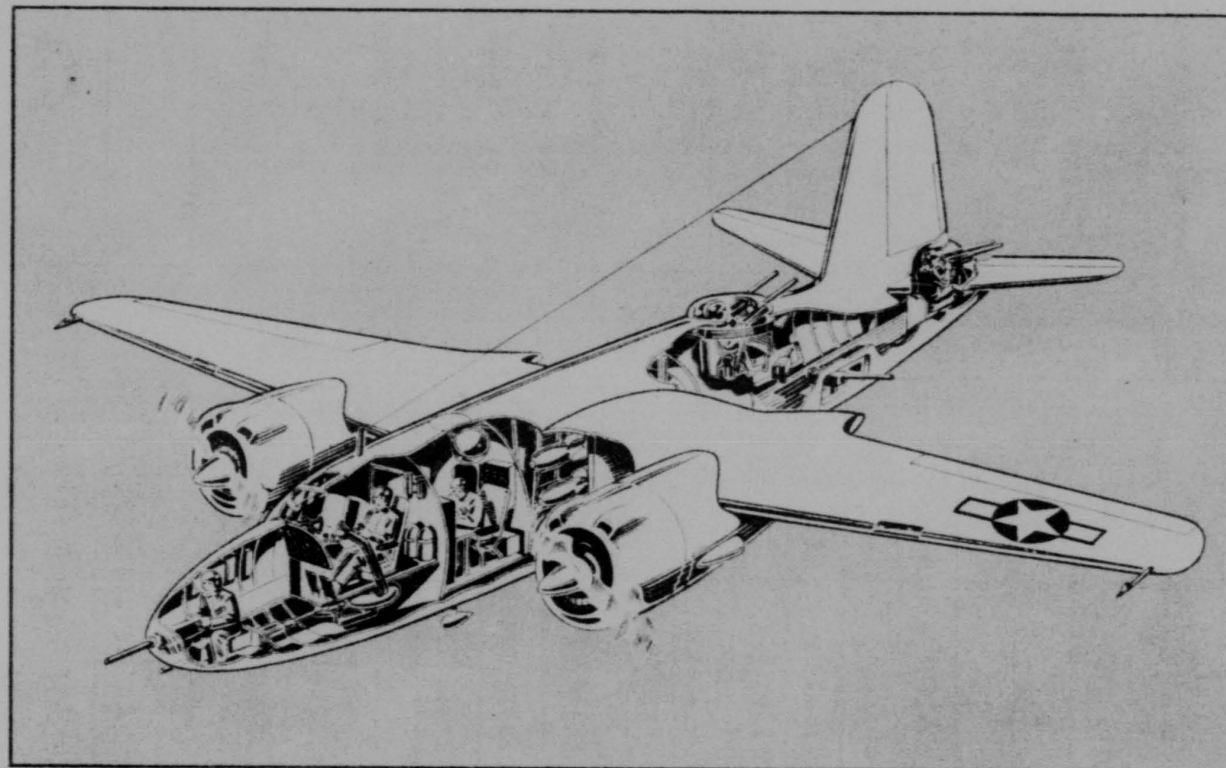
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AS OF:
25 JAN. 1945

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B-26 "MARAUDER"

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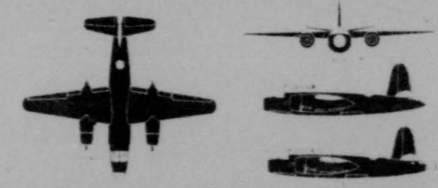
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TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART																	
MODEL & BLOCK-NO.	ENGINE & PROP.		SIZE		WEIGHT		COMBAT CREW	FUEL & OIL		ARMAMENT			BOMBS		RADIO	REMARKS & REFERENCE	
	NUMBER	ENGINE MFR. MODEL SUPERCHARGER PROP MFR. TYPE	B.H.P./ALT.		S-SPAN L-LENGTH H-HEIGHT T-TREAD W-WING AREA	B-BASIC C-COMBAT W-WAR MAX. M-MAX LAND		NOTES	FUEL TANKAGE		FWD ROCKETS-SIZE-INSTALLATION			NO. AND SIZE		TYPICAL MODELS CARRIED (SEE A)	REFER TO PAGE 2 FOR "FOREWORD" REFER TO PAGE 3 FOR SECURITY CLASSIFICATION REFER TO PAGE 5 FOR DEFINITIONS. REFER TO T.O. LISTED FOR DETAILED PLANNING.
			T-TAKE OFF W-WAR EMERG M-MILITARY C-CONTINUOUS	T-TAKE OFF W-WAR EMERG M-MILITARY C-CONTINUOUS					TYPE OR LOCATION (MAX OIL)	NO AND CAPACITY (MAX FUEL)	NO. GUNS AND SIZE	RDS. PER GUN	LOCATION AND TYPE	INTERNAL	EXTERNAL		
B-26B-MA -10 thru -20	2	PRATT-WHITEY R-2800-43 2 SPD. SUPERCHARGER	1920/3200	1920/3200	S 71' 0" L 58' 3" H 23' 6" W 38200*	B 25300 C 37000 W 38200*		MAIN - WINGS 2 x 350	11	250	WING - FLEX. 2-2000	2-2000	2-1600	2-1600	SCR-241	REFER TO PAGE 2 FOR "FOREWORD" REFER TO PAGE 3 FOR SECURITY CLASSIFICATION REFER TO PAGE 5 FOR DEFINITIONS. REFER TO T.O. LISTED FOR DETAILED PLANNING. B-26B & C TECH. ORDER 01-35EB-1. (REV. 30 APRIL 1945) B-26F & G TECH. ORDER 01-35EC-1. (REV. 15 OCT. 1944) (a) EARLY MODELS HAVE FLEXIBLE TAIL MOUNT WITH 1500 POUNDS PER GUN INSTEAD OF POWER MOUNT. (b) EARLY MODELS HAVE SAME NUMBER OF BOMB STATIONS AS LISTED ABOVE; DECREASE IN BOMB STATIONS AS NOTED DUE TO DELETION OF 2 REAR BOMB BAYS. (c) FUEL CAPACITY 20 GAL. PER TANK GREATER DUE TO INCREASE OF 3 1/2" ANGLE INCIDENCE OF WING.	
B-26C-MO -5 thru -25		CURTISS 13'6" DIA. -4 BL. S. P. ELECTRIC	1490/14300	1550/7100	S 71' 0" L 58' 3" H 23' 6" W 38200*	B 25300 C 37000 W 38200*		MAIN - WINGS 2 x 350	11	250	WING - FLEX. 2-2000	2-2000	2-1600	2-1600	SCR-241		
B-26B-MA -25 thru -55	2	AS ABOVE	AS ABOVE	AS ABOVE	S 71' 0" L 58' 3" H 23' 6" W 38200*	B 25300 C 37000 W 38200*		MAIN - WINGS 2 x 350	11	250	WING - FLEX. 2-2000	2-2000	2-1600	2-1600	SCR-241		
B-26C-MO -30 & -45		AS ABOVE	AS ABOVE	AS ABOVE	S 71' 0" L 58' 3" H 23' 6" W 38200*	B 25300 C 37000 W 38200*		MAIN - WINGS 2 x 350	11	250	WING - FLEX. 2-2000	2-2000	2-1600	2-1600	SCR-241		
B-26F-MA -1, -2 & -5	2	AS ABOVE	AS ABOVE	AS ABOVE	S 71' 0" L 56' 1" H 20' 4" W 34000	B 25500 C 37000 W 38200*		MAIN - WINGS 2 x 380	11	300	WING - FLEX. 2-2000	2-2000	2-1600	2-1600	SCR-241		
B-26G-MA -1 thru -25		AS ABOVE	AS ABOVE	AS ABOVE	S 71' 0" L 56' 1" H 20' 4" W 34000	B 25500 C 37000 W 38200*		MAIN - WINGS 2 x 380	11	300	WING - FLEX. 2-2000	2-2000	2-1600	2-1600	SCR-241		

MODEL & BLOCK-NO.	TAKE OFF & LANDING HARD SURFACE - NO WIND					HIGH SPEED & CLIMB CLEAN AIRPLANE AT NORMAL COMBAT WEIGHT					RANGE AND ENDURANCE STATUTE AIR MILES - NO WIND - NO ALLOWANCE FOR RESERVE										REMARKS				
	GROSS WEIGHT	TO CLEAR 50'		GROUND RUN		STD. ALT.	WAR EMERG. HIGH SPEED	MIL. POWER		MAX. CONTIN. POWER		LOADING			MAX. CONTINUOUS POWER		MAX. CRUISE POWER		LONG RANGE						
		T.O. DIST.	LAND DIST.	LANDING SPEED	T.O. DIST.			LAND DIST.	CLIMB	CLIMB	CLIMB	CLIMB	TIME TO CLIMB	TAKE OFF WEIGHT	BOMBS CARRIED	TOTAL FUEL	at 10000 FT.	at 20000 FT.	at 10000 FT.	at 20000 FT.		at 10000 FT.	at 10000 FT.		
B-26B-MA -10 thru -20	28000	-	3400	135	-	1800	20000	-	-	-	-	38200*	NO	1992	1425	5.2	1500	7.4	2375	10.4	2050	9.1	2900	13.3	
B-26C-MO -5 thru -25	32000	3000	3900	136	1900	2000	15000	282	500	278	430	23.0	37800	NO	1482	1000	3.8	1075	4.9	1725	7.8	1475	6.5	1925	9.2
B-26B-MA -25 thru -55	34000	3500	4200	138	2300	2200	10000	278	800	265	600	13.0	38200*	1500	1482	1000	3.8	1075	4.9	1700	7.8	1400	6.5	1900	9.2
B-26C-MO -30 & -45	36000	4000	-	-	2700	-	5000	285	1000	269	900	8.0	38300	2000	962	700	2.5	675	3.0	1100	4.9	800	4.0	1200	5.2
B-26F-MA -1, -2 & -5	28000	-	-	122	-	-	20000	256	-	258	-	-	38000	NO	1502	1050	3.9	1175	5.1	1775	8.0	1525	6.7	1875	9.5
B-26G-MA -1 thru -25	32000	2500	-	124	1800	-	15000	274	-	274	350	31.9	32000	NO	1002	725	2.4	700	3.1	1190	5.1	900	4.2	1250	5.5
	34000	3000	-	125	2200	-	10000	277	-	269	390	17.2	32000	2000	1002	725	2.4	700	3.1	1190	5.1	900	4.2	1250	5.5
	36000	3500	-	-	2500	-	5000	283	-	258	430	8.1	38200*	4000	962	700	2.4	675	3.2	1100	5.1	800	4.3	1125	5.7
	38200	4200	-	-	3000	-	37000	281	1000	242	600	0.0	38100	4000	962	650	2.5	675	3.1	1050	4.9	800	4.1	1075	5.4

- NOTES:
- (a) SCR-241 FREQUENCY METER
 - SCR-280A RADIO COMPASS
 - SCR-274A FORWARD SET
 - SCR-287A LIGHTS ON
 - SCR-222 FORWARD SET
 - SCR-551 SET
 - SCR-579 FORWARD SET
 - SCR-595 SET (REV)
 - SCR-495 SET (REV)
 - WC-32 FILTER DISCONNECT
 - WC-36 ELECTRONIC AMPLIFIER
 - WC-33 MARKER REACTION
 - WC-355 LOCALIZER
 - WC-104 FILTER DISCONNECT

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



B-26
"MARAUDER"

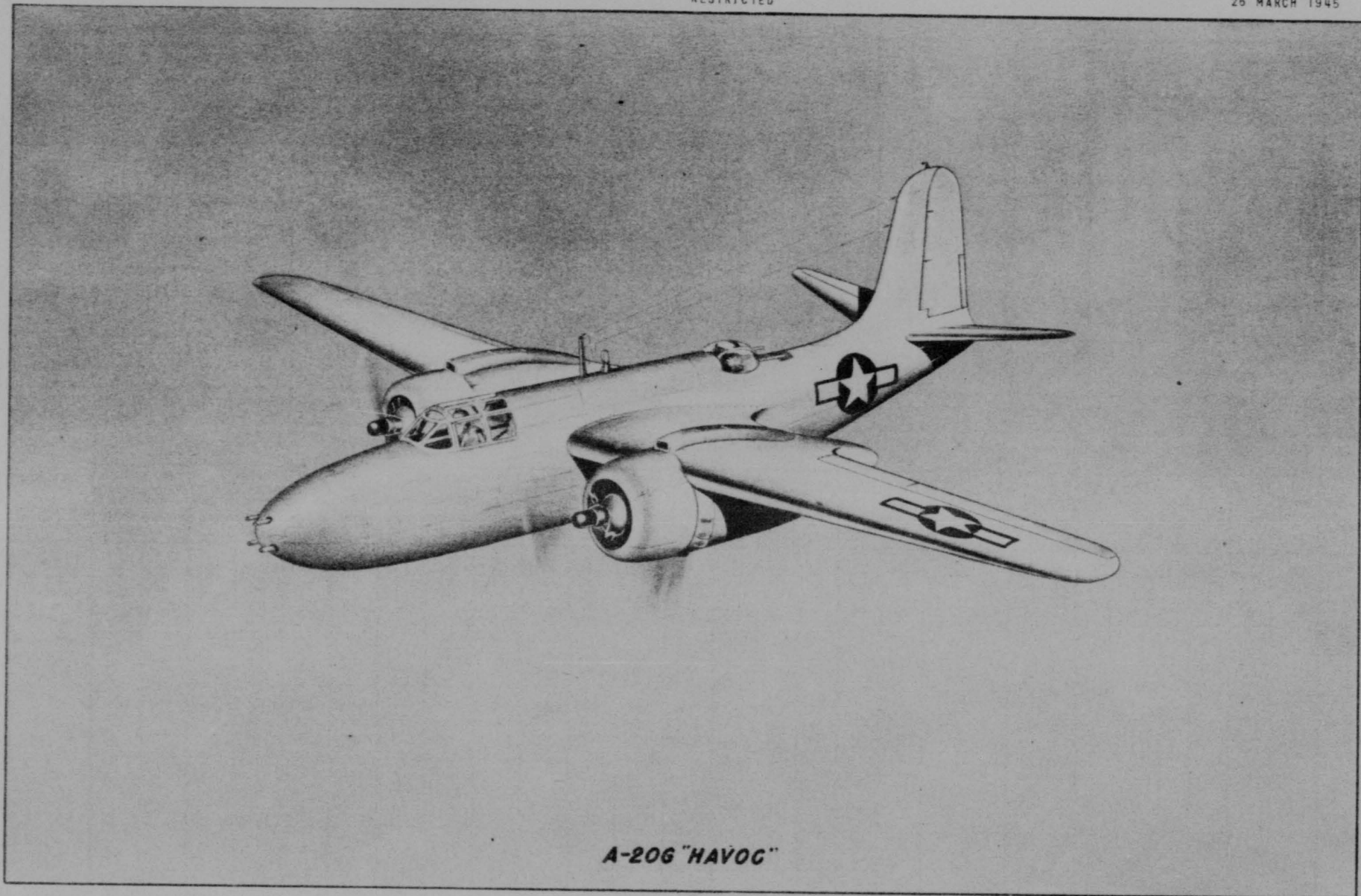
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PAGE 20
AS OF:
26 MARCH 1945



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TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART

PAGE 21

AS OF 20 MAY 1945

MODEL & BLOCK-NO.	ENGINE & PROP.		SIZE	WEIGHT	COMBAT CREW	FUEL & OIL	ARMAMENT			BOMBS		RADIO	REMARKS & REFERENCE		
	NUMBER	ENGINE MFR. MODEL SUPERCHARGER PROP. TYPE	B.H.P./ALT.	S-SPAN L-LENGTH H-HEIGHT T-TREAD W-WING AREA			B-BASIC C-COMBAT W-WAR MAX M-MAX LAND	FUEL TANKAGE		ENG. ROCKETS-SIZE-INSTALLATION		NO. AND SIZE		TYPICAL MODELS CARRIED (SEE 4)	
			T-TAKE OFF W-WAR EMERG M-MILITARY C-CONTINUOUS					TYPE OR LOCATION ALSO (MAX OIL)	NO AND CAPACITY ALSO (MAX FUEL)	NO. GUNS AND SIZE	RDS PER GUN	LOCATION AND TYPE			INTERNAL
A-20G-D0 -5 thru -15	2	WRIGHT R-2600-23 2 SPD. SUPERCH. HAMILTON STD. 11"3" DIA. -3 BL. F.F., HYDRA-MATIC	T-1800/5 L W-1875/5 L M-1800/1000 C-1350/5000 1275/11500	S-51' 4" L-48' 0" H-17' 7" T-17' 0" W-485 Sq. Ft.	B-17,000 C-24,000 W-30,000 M-24,000	1945 - WINGS OUTER - WINGS FUS. (BOMB R.) ROOT - WINGS (48)	2 x 138 2 x 94 2 x 70 4 - 580 (1600)	1 1 1 5	500 500 350	TUNNEL - FLEX. REAR COCKPIT NOSE - FIXED	4-500 4-250 4-100	1-2000T (PARTIALLY EXTERNAL)	2000	SCR-274 SCR-521 SCR-524 SCR-595 SCR-695 MC-26 RC-32 RC-38 RC-138 REFER TO PAGE 2 FOR "FOREWORD" REFER TO PAGE 3 FOR SECURITY CLASSIFICATION REFER TO PAGE 5 FOR DEFINITIONS. REFER TO T.O. LISTED FOR DETAILED PLANNING.	
A-20G-D0 -20 thru -45	2	A S ABOVE	A S ABOVE	S-51' 4" L-48' 0" H-17' 7" T-17' 0" W-485 Sq. Ft.	B-17,700 C-26,000 W-30,000 M-24,000	1950 - WINGS OUTER - WINGS FUS. (BOMB R.) DROOP - WINGS (48)	2 x 138 2 x 94 3 x 725 4 - 374 (1399)	1 1 2 5	400 400 350	TUNNEL - FLEX. UPPER TURRET NOSE - FIXED	4-500 4-250 4-100	4-500 4-250 4-100 1-2000T	4-500 4-500 4-500 4000	(A) NO TORPEDO PROVISIONS ON -40 & -45 MODELS. T TORPEDO (REPLACES INTERNAL BOMBS WHEN CARRIED) X EXTERNAL	
A-20J-D0 -1 thru -20	2	A S ABOVE	A S ABOVE	S-51' 4" L-48' 0" H-17' 7" T-17' 0" W-485 Sq. Ft.	B-17,900 C-25,000 W-30,000 M-24,000	A S ABOVE	1 2 2	400 400 350	TUNNEL - FLEX. UPPER TURRET NOSE - FIXED	AS ABOVE EXCEPT NO TORPEDO PROVISIONS ON -15 & -20 MODELS.					
A-20H-D0 -1 thru -15	2	WRIGHT R-2600-29 2 SPD. SUPERCH. HAMILTON STD. 11"3" DIA. -3 BL. F.F., HYDRA-MATIC	T-1700/5 L W-1850/5 L M-1450/1300 C-1500/6400 1350/5550	S-51' 4" L-48' 0" H-18' 1" T-17' 0" W-485 Sq. Ft.	B-17,900 C-25,000 W-30,000 M-24,000	A S ABOVE	1 2 2 5	400 400 350	TUNNEL - FLEX. UPPER TURRET NOSE - FIXED	4-500 4-250 4-100	4-500 4-250 4-100	4-500 4-500 4-500 4000			
A-20J-D0 -1 thru -15	2	A S ABOVE	A S ABOVE	S-51' 4" L-48' 0" H-17' 7" T-17' 0" W-485 Sq. Ft.	B-17,900 C-25,000 W-30,000 M-24,000	A S ABOVE	1 2 2 5	400 400 350	TUNNEL - FLEX. UPPER TURRET NOSE - FIXED	A S ABOVE	A S ABOVE	A S ABOVE			

MODEL & BLOCK-NO.	TAKE OFF & LANDING HARD SURFACE-NO WIND				HIGH SPEED & CLIMB CLEAN AIRPLANE AT NORMAL COMBAT WEIGHT						RANGE AND ENDURANCE STATUTE AIR MILES-NO WIND- NO ALLOWANCE FOR RESERVE										REMARKS									
	TO CLEAR 50'		GROUND RUN		STD. ALT.	WAR EMERG.		MIL. POWER		MAX. CONTIN. POWER		LOADING			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	HIGH SPEED	RATE OF CLIMB	TAKE OFF WEIGHT	BOMBS CARGO	TOTAL FUEL	at 10,000 FT.	at 20,000 FT.	at 10,000 FT.	at 20,000 FT.	at 10,000 FT.		at 10,000 FT.								
A-20G-D0 -5 thru -15	19000	-	3300	85	-	2100	20000	15000	10000	5000	NO DATA	305	420	302	350	16.5	25200	20000	1090	925	3.1	1050	3.6	1450	5.7	1575	8.7	2025	10.5	(B) FLIGHTS ABOVE 10000 FT. REQUIRE SPECIAL OXYGEN PROVISIONS.
A-20G-D0 -20 thru -45	21000	3900	3700	100	3100	2300	15000	10000	5000	20000	NO DATA	317	475	313	750	12.4	25000	20000	1099	425	1.5	475	1.8	625	2.5	675	2.9	875	4.2	
A-20J-D0 -1 thru -20	24000	4900	4000	105	3900	2600	15000	10000	5000	20000	NO DATA	305	420	297	1300	8.2	24000	2000T	540	350	1.4	425	1.7	575	2.2	625	2.8	776	4.0	
A-20H-D0 -1 thru -15	19000	-	3300	94	-	2100	20000	15000	10000	5000	NO DATA	315	475	289	500	16.5	25000	20000	1099	725	2.5	1000	3.6	1450	5.7	1575	8.7	2025	10.5	
A-20K-D0 -1 thru -15	21000	2900	3700	100	1900	2300	15000	10000	5000	20000	NO DATA	312	475	317	1000	11.0	25000	2000T	725	325	1.3	475	1.8	625	2.5	675	2.9	875	4.2	

NOTES:

ALL FIGURES ARE PRELIMINARY. SUBJECT TO REVISION AFTER FLIGHT CHECK.
* WHEELS 10" x 12" (10" x 12" ONLY)



A-20
"HAVOC"

MANUFACTURED BY DOUGLAS (1941-1945) "D"

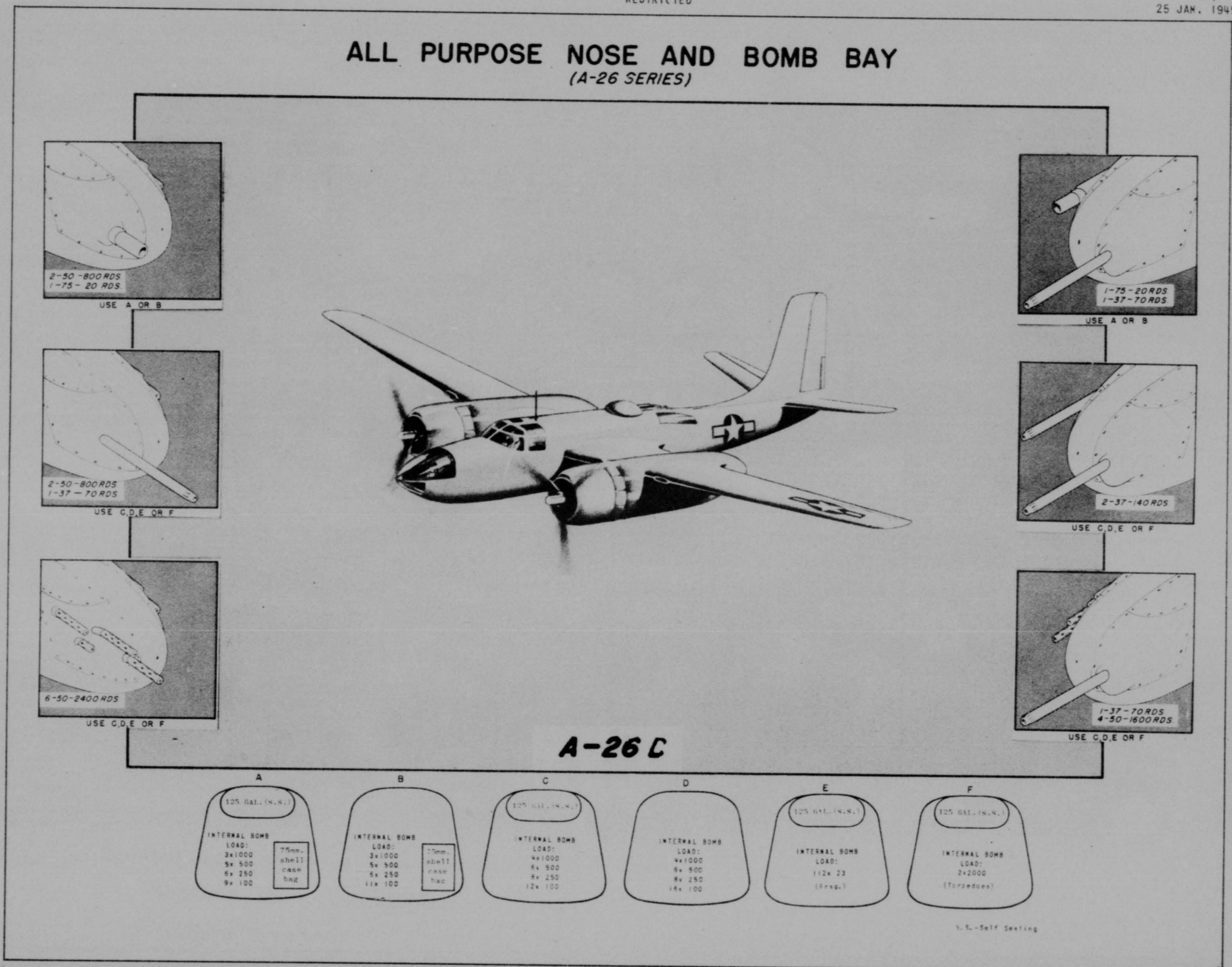
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PAGE 22
AS OF:
25 JAN. 1945

**ALL PURPOSE NOSE AND BOMB BAY
(A-26 SERIES)**



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TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART

PAGE 23
AS OF 29 MAY 1945

MODEL & BLOCK-NO.	ENGINE & PROP.		SIZE		WEIGHT		COMBAT CREW	FUEL & OIL		ARMAMENT			BOMBS		RADIO	REMARKS & REFERENCE	
	NUMBER	ENGINE MFR. MODEL SUPERCHARGER PROP. MFR. TYPE	B.H.P./ALT.		S-SPAN L-LENGTH H-HEIGHT T-TREAD W-WING AREA	B-BASIC C-COMBAT W-WAR MAX M-MAX LAND		NOTES	FUEL TANKAGE		(NO. ROCKETS-SIZE-INSTALLATION)			NO. AND SIZE			TYPICAL MODELS CARRIED (SEE 4)
			T-TAKE OFF W-WAR EMERG M-MILITARY C-CONTINUOUS	W					TYPE OR LOCATION ALSO (MAX. OIL)	NO. AND CAPACITY ALSO (MAX. FUEL)	NO. GUNS AND SIZE	RDS. PER GUN	LOCATION AND TYPE	INTERNAL	EXTERNAL		
A-26B-DL -1 & -5 A-26B-DT -1 & -5	2	PRATT-WHITNEY R-2800-27 SINGLE STD.-2 SPEED HAMILTON STD. 12"7" DIA.-3 BL. F.F., HYDROMATIC	2000/5 L 2340/5 L (2000/1500) (1600/1350) (1600/850) (1450/1400)	S 70' L 50' H 18' 5" T 19' 5" W 540 Sq. Ft.	B 23275 C 35000 W 42300* M 31000		2	MAIN - WINGS 2 x 300 AUX. - WINGS 2 x 100 BOMB BAY(S. S.) 1 x 125 B. BAY (FERRY) 1 x 575 (58)	1-75mm 2-50 2-50 4 4	20 500 500 300 300	*NOSE - TURRET UPPER TURRET LOWER TURRET *WINGS - PACKAGE	4-1000 6-500 8-250 15-100	2-2000 T 4-500 4-250 4-100	4-1000 4-500* *6000	SCR-269 SCR-274 SCR-522 SCR-595 SCR-695 HW-28 RC-36 AN/ARN-7	A-26B & C TECH. ORDER 01-40AJ-1 (REV. 20 APRIL 1945) (a) THE REMOVABLE WING PACKAGE GUNS ARE AN ALTERNATE INSTALLATION AND MAY BE MOUNTED ON WING BOMB RACKS IN PLACE OF BOMBS. (b) A-2600-75 WATER INJECTION ENGINE INSTALLED ON A-26B-45-DL THRU -60 AND A-26C-45-DT AND SUBSEQUENT MODELS; WAR EMERGENCY AND MILITARY RATINGS SHOWN WITH WATER INJECTION; WATER CAPACITY 23 GAL. PER TAKE. (c) TESTS ARE BEING CONDUCTED AT WEIGHTS IN EXCESS OF 35000 LB. (d) LATEST A-26B-DL MODELS ONLY, HAVE LOWER TURRET REMOVED AND INSTEAD 1 x 125 GAL. TANK INSTALLED. MAX. FUEL OF A-26C-45 IS 1910 GAL. * SEE PAGE OPPOSITE FOR ALL - PURPOSE NOSE INSTALLATIONS AND ALTERNATE BOMB LOADINGS. T TORPEDO V EXTERNAL	
A-26B-DL -10 thru -45 A-26B-DT -10 thru -25	2	PRATT-WHITNEY R-2800-27 or -71 SINGLE STD.-2 SPEED HAMILTON STD. 12"7" DIA.-3 BL. F.F., HYDROMATIC	AS ABOVE AS ABOVE	S 70' L 50' 7" H 18' 5" T 19' 5" W 540 Sq. Ft.	B 23275 C 35000* W 42300* M 31000		2	AS ABOVE EXCEPT	6 2 2 4	400 500 500 300	*NOSE UPPER TURRET LOWER TURRET *WINGS	AS ABOVE	AS ABOVE				
A-26B-DL -50 thru -60	2	PRATT-WHITNEY R-2800-27, -71, -79 SINGLE STD.-2 SPEED HAMILTON STD. 12"7" DIA.-3 BL. F.F., HYDROMATIC	AS ABOVE EXCEPT R-2800-79 IS RATED AS SHOWN BELOW	S 70' L 50' 7" H 18' 5" T 19' 5" W 540 Sq. Ft.	B 23275 C 35000* W 42300* M 31000		2	AS ABOVE EXCEPT	6 2 2 4	400 300 500 500	*NOSE WINGS UPPER TURRET LOWER TURRET	AS ABOVE	AS ABOVE				
A-26C-DT -15 thru -45	4	AS ABOVE	AS ABOVE	S 70' L 51' 3" H 18' 6" T 19' 5" W 540 Sq. Ft.	B 23750 C 35000 W 42300* M 31000		2	AS ABOVE EXCEPT A-26C-45 HAS 2 x 125 GAL. EXTERNAL WING TANKS ADDED	2 2 2	400 500 500	NOSE UPPER TURRET LOWER TURRET	4-1000 6-500 9-250 15-100	2-2000 T 4-500 4-250 4-100	4-1000 4-500* 5000			
A-26B & C CURRENT MODELS	2	PRATT-WHITNEY R-2800-75 SINGLE STD.-2 SPEED HAMILTON STD. 12"7" DIA.-3 BL. F.F., HYDROMATIC	2000/5 L 2390/5 L (2100/1500) (1540/1450) (1600/850) (1450/1400)	SAME AS A-26B & C LISTED AS ABOVE	B 23200 C SEE C W 42300* M 31000		2	MAIN - WINGS 2 x 300 AUX. - WINGS 2 x 100 BOMB BAY(S. S.) 1 x 125 B. BAY (FERRY) 1 x 675 EXTERNAL WINGS 2 x 125 LOWER FUSEL. 1 (58)	8 6 2 2	- 300 500 500	NOSE WINGS UPPER TURRET LOWER TURRET	AS ABOVE	AS ABOVE				

MODEL & BLOCK-NO.	TAKE OFF & LANDING HARD SURFACE-NO WIND				HIGH SPEED & CLIMB CLEAN AIRPLANE AT NORMAL COMBAT WEIGHT						RANGE AND ENDURANCE STATUTE AIR MILES-NO WIND- NO ALLOWANCE FOR RESERVE										REMARKS					
	GROSS WEIGHT LB.	TO CLEAR 50'		LANDING SPEED MPH	GROUND RUN		STD. ALT. FT.	WAR EMERG.		MIL. POWER		MAX. IORTIN. POWER		LOADING			MAX. CONTINUOUS POWER		MAX. CRUISE POWER			LONG RANGE				
		T.O. DIST. FT.	LAND DIST. FT.		T.O. DIST. FT.	LAND DIST. FT.		WEIGHT LB.	HIGH SPEED 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.	TAKE OFF WEIGHT LB.	BOMBS CARGO LBS.	TOTAL FUEL U.S. GAL.	at 10000FT. RANGE MILES	at 20000FT. RANGE MILES		at 10000FT. RANGE MILES	at 20000FT. RANGE MILES	at 10000FT. RANGE MILES	at 10000FT. RANGE MILES	
A-26B & C MODELS	25000 30000 32000 34000 35000	- 4200 5600 8700 7200	3500 4100 - - -	- 2900 3900 4200 4500	1900 2300	20000* 15000* 10000 5000 S L	NO DATA	337 355 346 350 328	330 820 1150 1540 2030	329 341 330 320 297	300 780 1050 1270 1440	23.4 13.4 8.1 3.7 0.0	35000 31400 34400 34600	4081 NONE 3000 4000	1600 925 925 800	1200 575 550 550	3.7 2.1 2.1 1.7	1850 925 875 750	5.1 2.8 2.8 2.4	2300 1300 1400 1175	7.9 5.2 5.3 4.5	2300 1225 1000	8.0 4.3 3.0	2900 1675 1575 1300	14.7 7.9 7.0 5.8	(a) SPECIAL PROVISIONS FOR OXYGEN REQUIRED. (f) HIGH SPEED DECREASES APPROX. 10% M.P.H. & RATE OF CLIMB 50 FT. PER MINUTE WHEN 8 EXTERNAL PACKAGE GUNS ARE CARRIED.

- NOTES:
(a) SCR-269 RADIO COMPASS
SCR-274 COMMAND SET
SCR-522 COMMAND SET
SCR-595 IFF
SCR-695 IFF
HW-28 RADIO COMPASS
RC-36 INTERPHONE AMPLIFIER
AN/ARN-7 RADIO COMPASS

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



A-26
"INVADER"

MANUFACTURED BY DOUGLAS (LONG BEACH) 'DL' & (TULSA) 'DT'

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TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART																	
MODEL & BLOCK NO.	ENGINE & PROP.		SIZE		WT.	COMBAT CREW	FUEL		ARMAMENT			BOMBS-CARGO-PASS.		RADIO	REMARKS & REFERENCE		
	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 W-WEIGHT 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-1710-87 SINGLE SPEED CURTISS 10'9" DIA. - 38L. CONST. SPD. ELECT.	T 1325/3 L M 1325/400 W* 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 W 10700	1	MAIN - WING EXT. - WING	2 x 90 2 x 75 or 2 x 50 L80 TOT.	2-.50 L-.50	200 200	WING - FIXED WING - FIXED	NONE	2-500 2-325 2-250	1000	SCR-27LN SCR-535 SCR-595**	TECHNICAL ORDER 01-6083-1. (10 JULY 1943) ** WAR EMERGENCY RATING. ** LAST 399 ONLY.	
			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 <small>HARD SURFACE - NO WIND</small>				HIGH SPEED & CLIMB <small>AT NORMAL COMBAT WEIGHT</small>					RANGE & ENDURANCE <small>STATUTE AIR MILES - NO WIND - NO ALLOWANCE FOR RESERVE</small>										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	TIME TO CLIMB				RANGE	ENDUR.	RANGE	ENDUR.	RANGE		ENDUR.	RANGE	ENDUR.	RANGE	ENDUR.
A-36A-NA	9000 13000 11000	2500 3400 4100	3000 3500 -	- - -	2050 2500 3200	2100 2200 -	10000	20000 15000 10000 5000 S L	288 295 305 310 295	500 1025 1525 2075 2200	277 285 293 293 275	300 # # # #	16.6 9.1 5.1 2.4 0.0	11000 10000 9000 10000	NONE NONE NONE 1000	1450 330 160 500	1100 1000 550 500	5.1 4.5 1.8 1.8	- - - -	- - - -	- - - -	- - - -	2100 1500 850 800	9.4 7.0 3.5 3.4	* WITH 2-500 LB. EXTERNAL BOMBS.

NOTES:

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



A-36
"MUSTANG"

MANUFACTURED BY NORTH AMERICAN (Inglewood) "NA"

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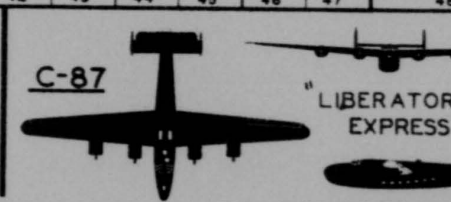
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TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART																	
MODEL & BLOCK-NO.	ENGINE & PROP.			SIZE	WEIGHT	COMBAT CREW	FUEL & OIL		CARGO OR PASSENGERS			RADIO	REMARKS & REFERENCE				
	NUMBER	ENGINE MFR. MODEL SUPERCHARGER PROP. MFR. TYPE	B.H.P./ALT. T-TAKE OFF W-WAR EMERG M-MILITARY C-CONTINUOUS				S-SPAN L-LENGTH H-HEIGHT T-TREAD W-WING AREA	B-BASIC C-COMBAT W-WAR MAX. M-MAX LAND.	FUEL TANKAGE		STATION			CAPACITY	MAX. LOAD	STATION	PLACES
				TYPE OR LOCATION ALSO (MAX. OIL)	NO. AND CAPACITY ALSO (MAX. FUEL)				MAX. LOAD	MAX. LOAD							
C-69-LD -1 thru -10	4	WEIGHT R-3350-35 SINGLE SPEED HAMILTON STD. 15" 2" DIA.-3 BL. F.F., HYDROMATIC	T 2200/ 5 L W NONE M 2200/ 5000 C 2000/ 5000	S 127' 0" L 35' 2" H 23' 8" T 28' 0" W 1850 Sq. ft.	B 50500 C 82000 W 101000 M 82000	3	OUTBD.-WINGS 2 x 1500 INBD.-WINGS 2 x 820 (200)	CARIN-MAIN	21000	71000	PERSONNEL BAGGAGE	50 2500	14000	C-69 TECHNICAL ORDER 01-75CJ-1. (REV. 15 MAR. 1945) C-82 (PRELIMINARY INFORMATION) MAY 1945. C-87 TECHNICAL ORDER 01-SCA-1. 125 APRIL 1945 (a) C-69-10-LD HAS ONLY 43 PLACES; OTHERS HAVE 60. (b) SOME MODELS HAVE 1-50 CAL. FLEET TAIL GUN WITH 500 RDS. (A) SCR-211 FREQUENCY METER SCR-207 RADIO COMPASS SCR-214 COMMAND SET SCR-207 LIAISON SET SCR-522 COMMAND SET SCR-576 EMERGENCY TRANSMITTER SCR-595 IFF RC-35 INTERPHONE AMPLIFIER RC-45 MARKER BEACON RC-575 LOCALIZER RC-193 MARKER REACTOR AN/AP-4-1 AN/AP-7 INTERPHONE AN/AP-1 LOW ALTITUDE ALTIMETER AN/AP-11 PERISCOPE READING RECKON AN/AP-9 LOGAN AN/AP-9 AN/AP-10 PANEL CONTROL SYSTEM AN/AP-11 LIAISON SET AN/AP-5 OIL-BURN PATH AN/AP-7 RADIO COMPASS AN/AP-11 RADIO COMPASS AN/AP-3 STATIC DISCHARGE			
C-82 { FA NT	2	PRATT-WHITEY R-2800-22C INTEGRAL SUPERCH. HAMILTON STD. 15" 2" DIA.-3 BL. F.F., HYDROMATIC	T 2100/ 5 L W NONE M 2100/ 1000 C 1600/ 16000 1700/ 7000 1450/ 18500	S 106' 5" L 75' 10" H 26' 4" T 28' 0" W 1400 Sq. ft.	B 33900 C 56000 W 71200 M 56000	5	OUTBD.-WINGS 2 x 785 INBD.-WINGS 2 x 775 AUX.-WINGS 2 x 344 (180)	CARIN-MAIN	19400	19400	TROOPS PARACANS ATTENDANTS	42 2500 32	12800 8000				
C-87-CF	4	PRATT-WHITEY R-1830-43 or -65 TURBO HAMILTON STD. 11" 7" DIA.-3 BL. F.F., HYDROMATIC	T 1200/ 5 L W NONE M 1200/ 26500 C 1100/ 27000	S 110' 0" L 86' 4" H 18' 0" T 25' 8" W 1048 Sq. ft.	B 33900 C 56000 W 71200 M 56000	5	INBD.-WINGS 12 x 2354 OUTBD.-WINGS 5 x 410 (156)	CARIN-MAIN NOSE COMPART.	11000 1000	12000	PERSONNEL BAGGAGE	20 800	4800				
			T W M C	S L H T W	B C W M												
			T W M C	S L H T W	B C W M												

MODEL & BLOCK-NO.	TAKE OFF & LANDING HARD SURFACE-NO WIND					HIGH SPEED & CLIMB CLEAN AIRPLANE AT NORMAL COMBAT WEIGHT					RANGE AND ENDURANCE STATUTE AIR MILES-NO WIND-NO ALLOWANCE FOR RESERVE										REMARKS					
	GROSS WEIGHT LB	TO CLEAR 50'		LANDING SPEED MPH	GROUND RUN FT	STD. ALT. FT	WAR EMERG.		MIL. POWER		MAX. CONTIN. POWER		LOADING			MAX. CONTIN.		LONG RANGE CRUISE								
		T.O. DIST. FT	LAND DIST. FT				HIGH SPEED 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	TAKE OFF WEIGHT LB	BOMBS CARGO PDS	TOTAL FUEL U.S. GAL	at 10000 FT.	at 5000 FT.	at 10000 FT.			at 15000 FT.		at 20000 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	RANGE MILES	ENDUR. HOURS	RANGE MILES	ENDUR. HOURS		RANGE MILES	ENDUR. HOURS			
C-69-LD -1 thru -10	55000 70000 75000 80000 93000	- 2300 2700 3100 4500	2400 2900 3000 2100 3000	85 91 92 1800 3000	1100 1300 1300 2100 -	20000 15000 10000 5000 S L	NO DATA	312 322 329 327 311	- - 1800 1800	308 317 323 320 304	225 520 1030 1500 1700	21.0 13.3 7.1 6.2 0.0	42000 43000 47000	NO DATA 1000 14000	4015 4616 3178	2275 2200 2225	7.4 7.4 7.4	4021 3800 3950	19.4 17.1 18.7	4050 3775 3925	17.9 15.6 17.4	3925 3675 3800	15.1 15.2 15.8	3000 3225 3050	10.4 12.7 10.9	(c) A.R. MIXTURE NECESSARY FOR ENTIRE FLIGHT. (d) FIRST 5.6 HRS. AT 15,000 FT. WITH A.L. MIXTURE; BALANCE AT 20,000 FT. WITH A.L. MIXTURE. (e) FIRST 2.5 HRS. AT 15,000 FT. WITH A.L. MIXTURE; BALANCE AT 20,000 FT. WITH A.L. MIXTURE.
C-82 { FA NT	30000 35000 43500	- 2000 2300	1800 2000 2300	82 86 91	1100 1200 1400	20000 15000 10000 5000 S L	NO DATA	312 322 329 327 311	- - 1800 1800	308 317 323 320 304	225 520 1030 1500 1700	21.0 13.3 7.1 6.2 0.0	42000 43000 47000	NO DATA 1000 14000	4015 4616 3178	2275 2200 2225	7.4 7.4 7.4	4021 3800 3950	19.4 17.1 18.7	4050 3775 3925	17.9 15.6 17.4	3925 3675 3800	15.1 15.2 15.8	3000 3225 3050	10.4 12.7 10.9	(c) A.R. MIXTURE NECESSARY FOR ENTIRE FLIGHT. (d) FIRST 5.6 HRS. AT 15,000 FT. WITH A.L. MIXTURE; BALANCE AT 20,000 FT. WITH A.L. MIXTURE. (e) FIRST 2.5 HRS. AT 15,000 FT. WITH A.L. MIXTURE; BALANCE AT 20,000 FT. WITH A.L. MIXTURE.
C-87-CF	35000 40000 45000 50000 56000 62000	- 2100 2500 2900 3800 5000	2300 2700 3000 3200 4300 5000	87 90 95 100 105 3800	2000 2300 2400 2600 3300 -	25000 20000 15000 10000 5000	NO DATA	306 293 280 266 255	1050 1100 1150 1200 1200	300 287 275 262 246	850 900 950 1000 1000	26.8 20.9 15.3 9.0 4.2	53500 56000 62000	NO DATA 2500 8500	2814 2814 2814	NO RELIABLE DATA	3175 3050 2800	19.5 18.4 17.0	3150 3025 2775	17.4 15.8 15.7	3050 2950 2700	15.5 14.9 13.7	3000 2875 2600	14.5 14.0 12.9	(c) A.R. MIXTURE NECESSARY FOR ENTIRE FLIGHT. (d) FIRST 5.6 HRS. AT 15,000 FT. WITH A.L. MIXTURE; BALANCE AT 20,000 FT. WITH A.L. MIXTURE. (e) FIRST 2.5 HRS. AT 15,000 FT. WITH A.L. MIXTURE; BALANCE AT 20,000 FT. WITH A.L. MIXTURE.	

NOTES:
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* MILITARY POWER AVAILABLE FOR 5 MINUTES ONLY.




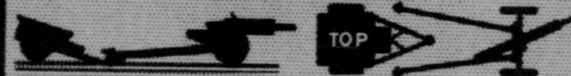
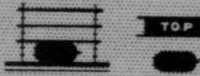




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PAGE 26
AS OF: 26 MAY 1945

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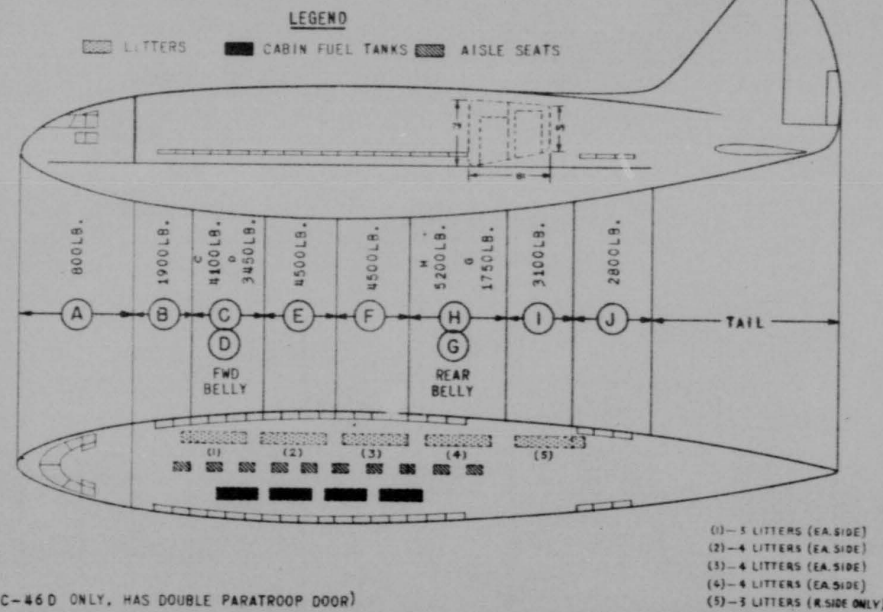
LOADING THE CURTISS "COMMANDO"

ITEM	WEIGHT	STATION
JEEP 	3100 LB.	(C) THRU (H)
105 MM GUN & CAISSON 	GUN 4300LB. CAISSON 4700LB.	(E) THRU (H)
LITTERS 	3 TIER LITTER 50LB. OXYGEN BOTTLE 138LB.	REAR - (B) THRU FORE - (J)
75 MM HOWITZER & CAISSON 	HOWITZER 2100LB. CAISSON 5000LB.	(C) THRU (H)
37 MM GUN & MOTOR CHASSIS 	5500LB.	(C) THRU (H)
75 MM GUN & CAISSON 	GUN 3400LB. CAISSON 5000LB.	(C) THRU (H)
LARGE ENGINE & MOUNT 	4900LB.	(C) THRU (I)

WEIGHT LEGEND

ATTENDANT OR PASSENGER — 200LB.
TROOP AND EQUIPMENT — 240LB.
LITTER (INCL. PATIENT) — 250LB.
PARACAN — 250LB.
PARATROOPER — 260LB.

LOADING STATIONS OF THE C-46



ANY COMBINATION OF CARGO CAN BE CARRIED BUT MUST SATISFY FOUR REQUIREMENTS: (1) Total weight. (2) Space limitations. (3) Center of gravity. (4) Floor loading. (Typical items are illustrated).

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TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART

PAGE 254
AS OF 26 MAY 1945

MODEL & BLOCK-NO.	ENGINE & PROP.		SIZE	WEIGHT	COMBAT CREW	FUEL & OIL		CARGO OR PASSENGERS			RADIO	REMARKS & REFERENCE						
	NUMBER	ENGINE MFR. MODEL SUPERCHARGER PROP MFR. TYPE				B.H.P./ALT.	S-SPAN L-LENGTH H-HEIGHT T-TREAD W-WING AREA	B-BASIC C-COMBAT W-WAR MAX M-MAX LAND	FUEL TANKAGE				STATION	CAPACITY	MAX. LOAD	STATION	PLACES	MAX. LOAD
									TYPE OR LOCATION ALSO (MAX. OIL)	NO. & CAPACITY ALSO (MAX. FUEL)								
C-46A-5 thru -54 (CS) C-46A-1, -5, -15, -40 (CX) C-46A-1 (CS) C-46D-1 thru -20 (CS)	2	PRATT-WHITNEY R-2600-51 or -75 2 SPEED-SINGLE STL CURTISS 13' 5" DIA. - 4 BL. F.F., ELECTRIC	T 2000/ 5 L W NONE M 2000/ 1500 C 1600/ 13500 1450/ 13000	S 108' 0" L 79' 4" H 22' 0" T 29' 0" W 1360 Sq. ft.	B 31500 C 46000 W 56000* M 49500	4	WING - FORE 2 x 294 WING - CENTER 2 x 296 WING - REAR 2 x 171 FUSEL. - REMOVE 2 x 100 (40 x 40) (220)	CAPIN (MAIN) 10000 BELLY (FORE) 3700 BELLY (AFT) 1800	15000	LB.	TROOPS* 50 or LITTERS ATTENDANTS 33 4	12000 or 9000	304-211, 250, 270A, 287, 516, 522, 576, 695, RC-36, 43, 103, 198, HW-25 AN/A1C-2, 3 AN/ARA-10 AN/ARC-7, 9, 11 AN/AR-1 AN/AS-1 AN/AV-1, 2, 3	C-46 SERIES TECH. ORDER 01-25LA-1. (15 DEC. 1944) (a) LATER C-46D's HAVE EXTRA PARATROOP DOOR.				
C-46E-CS -1	2	PRATT-WHITNEY R-2600-75 2 SPEED-SINGLE STL HAMILTON STD. 15' 1" DIA. - 3 BL. F.F., HYDRA-MATIC	T AS ABOVE W AS ABOVE M AS ABOVE C AS ABOVE	S AS ABOVE L AS ABOVE H AS ABOVE T AS ABOVE W AS ABOVE	B AS ABOVE C AS ABOVE W AS ABOVE M AS ABOVE	4	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE						

REFER TO PAGE 2 FOR "FOREWORD"
REFER TO PAGE 3 FOR SECURITY CLASSIFICATION
REFER TO PAGE 5 FOR DEFINITIONS
REFER TO T.O. LISTED FOR DETAILED PLANNING.

MODEL & BLOCK-NO.	TAKE OFF & LANDING HARD SURFACE - NO WIND				HIGH SPEED & CLIMB CLEAN AIRPLANE AT NORMAL COMBAT WEIGHT							RANGE AND ENDURANCE STATUTE AIR MILES - NO WIND - NO ALLOWANCE FOR RESERVE										REMARKS				
	GROSS WEIGHT	TO CLEAR 50'		GROUND RUN		WEIGHT	STD. ALT.	WAR EMERG.		MIL. POWER		MAX. CONTIN. POWER			LOADING			MAX. CONTIN.		LONG RANGE CRUISE						
		T.O. DIST.	LAND DIST.	T.O. DIST.	LAND DIST.			HIGH SPEED	RATE OF CLIMB	HIGH SPEED	RATE OF CLIMB	HIGH SPEED	RATE OF CLIMB	TIME TO CLIMB	TAKE OFF WEIGHT	BOMBS CARGO PASS.	TOTAL FUEL	at 10000FT.	at 5000FT.	at 10000FT.	at 15000FT.		at 20000FT.			
C-46A-5 thru -54 (CS) C-46A-1, -5, -15, -40 (CX) C-46A-1 (CS) C-46D-1 thru -20 (CS) C-46E-1 (CS)	24000 28000 40000 45000 50000	- 1900 2200 2700 3400	2300 2400 2500 2700 -	82 88 94 96 -	1200 1400 1500 1600 -	20000 15000 10000 5000 5 L	20000 15000 10000 5000 5 L	250 259 254 252 245	145 175 800 1000 1200	737 746 740 730 216	281 525 528 797 786	34.5 21.7 12.4 7.0 0.0	50000 48000 48000 50000 50000	2000 4000 8000 10000 10000	2702 1902 5000 1040 1040	1425 900 650 625 4	4.0 3.8 2.7 2.7 -	2950 1600 1300 1225 -	16.5 10.3 7.3 7.0 -	2750 1750 1250 1150 -	14.7 9.3 6.7 6.2 -	2700 1700 1200 1000 -	13.9 10.2 7.3 5.3 -	IMPRACTICAL 1500 1050 IMPRACTICAL		

NOTES:	EARLY TYPES	NAME	LATER TYPES
	(a)	SC-101	FREQUENCY METER
	SC-102	COMPASS	AN/ADM-7 & 11
	SC-104, 527	COMMAND SET	AN/ARC-8
	SC-107	114,500 SET	-
	SC-118	HIGH ALTITUDE ALTIMETER	-
	SC-176	EMERGENCY TRANSMITTER	-
	SC-295	SET	AN/ARC-9
	SC-31	INTERPHONE	AN/A1C-7 & T
	SC-103	MARKER BEACON	-
	SC-198	LOCALIZER	-
	-	FILTER EQUIPMENT	AN/APN-1
	-	LOW ALTITUDE ALT. METER	AN/APN-2
	-	REBECCA (REAR CO. RECEIVER)	AN/APN-3
	-	LOWAR	AN/APN-4
	-	PANEL CONTROLS SYSTEM	AN/APN-5
	-	SLIDE PATH	AN/APN-6
	-	WING ADAPTER	AN/APN-7
	-	STATIC DISCHARGE	AN/APN-8

MANUFACTURED BY CURTISS (BUFFALO) "CS"; (ST. LOUIS) "CX" & (LOUISVILLE) "CX"









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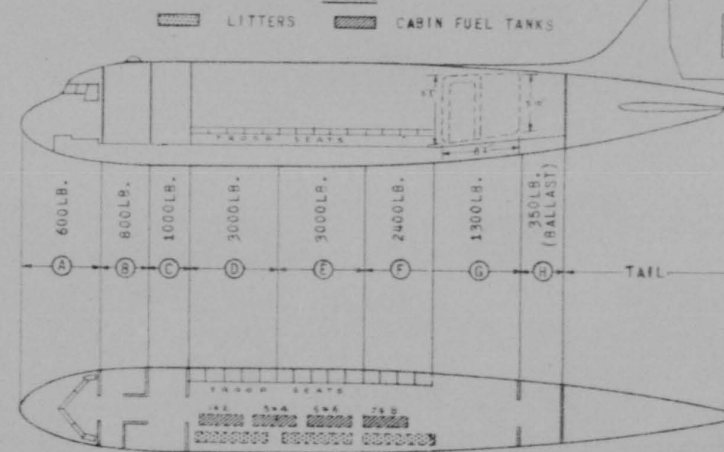
LOADING THE DOUGLAS "SKYTRAIN"

ITEM	WEIGHT	STATION
JEEP 	3100 LB.	(D) OR (E)
LITTERS 	3 TIER LITTER 50LB. OXYGEN BOTTLE 138LB.	(D) THRU (F)
75 MM HOWITZER & CAISSON 	HOWITZER 2100LB. CAISSON 5000LB.	(D) THRU (F)
37 MM GUN & MOTOR CHASSIS 	5500LB.	(D) AND (E)
75 MM GUN & CAISSON 	GUN 3400LB. CAISSON 5000LB.	(D) THRU (F)
LARGE ENGINE & MOUNT 	4900LB.	(D) AND (E)

WEIGHT LEGEND

ATTENDANT OR PASSENGER — 200LB.
 TROOP AND EQUIPMENT — 240LB.
 LITTER (INCL. PATIENT) — 250LB.
 PARACAN — 250LB.
 PARATROOPER — 260LB.

LOADING STATIONS OF THE C-47



(3) 3 TIER LITTERS EA. SIDE
 RH-14
 LN-13) TROOPS

ANY COMBINATION OF CARGO CAN BE CARRIED BUT MUST SATISFY FOUR REQUIREMENTS: (1) Total weight. (2) Space limitations. (3) Center of gravity. (4) Floor loading. (Typical items are illustrated).

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TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART																			
MODEL & BLOCK-NO.	ENGINE & PROP.			SIZE		WEIGHT		COMBAT CREW	FUEL & OIL		CARGO OR PASSENGERS			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 W-WAR MAX M-MAX LAND	NOTES	FUEL TANKAGE		STATION	CAPACITY	MAX LOAD	STATION	PLACES	MAX LOAD	TYPICAL MODELS CARRIED	REFER TO PAGE 2 FOR "FOREWORD" REFER TO PAGE 3 FOR SECURITY CLASSIFICATION REFER TO PAGE 5 FOR DEFINITIONS. REFER TO T.O. LISTED FOR DETAILED PLANNING.			
							TYPE OR LOCATION (MAX OIL)												NO AND CAPACITY (MAX FUEL)
C-47A thru -90 (DL) C-47A thru -30 (DK) C-53C & D (DL)	2	PRATT-WHITNEY R-1830-92 INTEGRAL SUPER. HAMILTON STD. 11"7" DIAL - 3 RL. F.F., HYDROMATIC	T 1200/ 5 L W NONE M NONE C 1050/ 7500	S 95' 0" L 64' 5" H 17' 0" T 18' 6" W 98' 5 1/2'	B 18200 C 25000 W 35500* M 29300		4	MAIN-WINGS 2 x 252 AUX-WINGS 2 x 250 FUSEL. (HE-OWE) 1 x 100 (50)	CAJIN-MAIN	10000	10000	TRIPPS BY LITTERS ATTENDANTS	27* 16 2	4500 4900	304-147,211 259, 274, 287, 322, 376, 505 & 595. RC-26, 43, 103, 193 & 195. AN/STW-11,2 AN/ANM-5,7 AN/ARR-1 AN/ASA-1,2	C-47A & B TECH. ORDER 01-40NC-1. (REV. 5 JAN. 1945) (a) C-53 CARRIES 24 TROOPS & HAS SMALL CARGO DOOR.			
C-47B-DK -1 thru -35 C-47B-DL -1	2	PRATT-WHITNEY R-1830-90C 2 STAGE - 2 SPD. HAMILTON STD. 11"7" DIAL - 3 RL. F.F., HYDROMATIC	T 1200/ 5 L W NONE M 1200/ 5000 C 1050/ 11000	S 95' 0" L 65' 8" H 16' 11" T 18' 6" W 98' 5 1/2'	AS ABOVE		4	AS ABOVE											
COLUMN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	

MODEL & BLOCK-NO.	TAKE OFF & LANDING HARD SURFACE - NO WIND					HIGH SPEED & CLIMB CLEAN AIRPLANE AT NORMAL COMBAT WEIGHT							RANGE AND ENDURANCE STATUTE AIR MILES - NO WIND - NO ALLOWANCE FOR RESERVE										REMARKS					
	GROSS WEIGHT	TO CLEAR 50'		GROUND RUN		WEIGHT	STD ALT.	WAR EMERG.		MIL. POWER		MAX. CONTIN. POWER			LOADING			MAX. CONTIN.		LONG RANGE CRUISE								
		LB	T.O. DIST. FT.	LAND DIST. FT.	LANDING SPEED MPH			T.O. DIST. FT.	LAND DIST. FT.	HIGH SPEED 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.	TAKE OFF WEIGHT LB	BOMBS CARGO PASS. LB	TOTAL FUEL U.S. GAL.	at 10000FT. RANGE MILES	at 10000FT. ENDUR. HOURS	at 5000FT. RANGE MILES		at 5000FT. ENDUR. HOURS	at 10000FT. RANGE MILES	at 10000FT. ENDUR. HOURS	at 15000FT. RANGE MILES	at 15000FT. ENDUR. HOURS
C-47A thru -90 (DL) C-47A thru -30 (DK) C-53C & D (DL)	20000 24000 26000 29000 31000	- 2000 2400 2700 -	2000 2400 2700 -	70 74 76 -	- 1300 1600 -	1200 1500 1600 5000 5 L	20000 15000 10000		NO DATA	SAME AS FOR MAX. CONTINUOUS POWER	201 217 224 219 203	100 150 90.2 # 4.4 92.5	10.2 15.0 9.2 # 4.4 9.0	29300 29200 29200 31000	404 300 500 4700	1504 1004 504 404	2075 1500 925 925	10.5 8.8 8.8 8.8	3500 2200 1600 1450	22.5 14.3 9.9 9.1	3425 2370 1525 1450	20.5 12.4 8.0 8.6	3025 2050 1325 985	30.0 19.0 13.0 10.0	2300 1550 1000 750	16.0 10.8 7.5 6.8		(b) RANGE AND ENDURANCE BASED ON REDUCED POWER SETTINGS DUE TO SPEED LIMITATIONS. (c) FIRST 5.5 HRS. OF FLIGHT INCLUDING CLIMB. ARE AT 15000 FT. ALT. (d) FIRST 5.5 HRS. OF FLIGHT INCLUDING CLIMB. ARE AT 11000 FT. ALT.
C-47B-DK -1 thru -35 C-47B-DL -1	20000 24000 26000 29000 31000	- 2100 2400 2700 -	2300 2500 2800 -	70 74 76 -	- 1200 1500 -	1300 1500 1700 10000 5000	25000 20000 15000		NO DATA		201 217 224 219 203	100 150 90.2 # 4.4 92.5	10.2 15.0 9.2 # 4.4 9.0	29300 29200 29200 31000	404 300 500 4700	1504 1004 504 404	2075 1500 925 925	10.5 8.8 8.8 8.8	3500 2200 1600 1450	22.5 14.3 9.9 9.1	3425 2370 1525 1450	20.5 12.4 8.0 8.6	3025 2050 1325 985	30.0 19.0 13.0 10.0	2300 1550 1000 750	16.0 10.8 7.5 6.8		

NOTES:

- (A) SCP-187 STATION SET
- SCP-213 FREQUENCY METER
- SCP-289 RADIO COMPASS
- SCP-274 COMMAND SET
- SCP-267 LIGHTS ON SET
- SCP-512 COMMAND SET
- SCP-510 EMERGENCY TRANSMITTER
- SCP-595 IFF
- SCP-655 IFF
- SC-106 INSTRUMENT
- SC-85 MAINS REASON
- SC-201 LOCAL LIGHT
- SC-201 MAINS REASON
- SC-230 FILTER EQUIPMENT
- AN/APN-1 LOW ALTITUDE ALTIMETER
- AN/APN-2 "SERVO" ALTITUDE INDICATOR
- AN/APN-5 GLIDE PATH
- AN/APN-7 RADIO
- AN/APN-11 OILING ADAPTER
- AN/APN-13 STATIC DISCHARGE

RED FIGURES ARE PRELIMINARY. SUBJECT TO REVISION WITH FLIGHT CHECK.
* MILITARY POWER AVAILABLE FOR 4 HOURS ONLY.



MANUFACTURED BY DOUGLAS (LONG BEACH) "DL" & (IRVINGDALE CITY) "DK"








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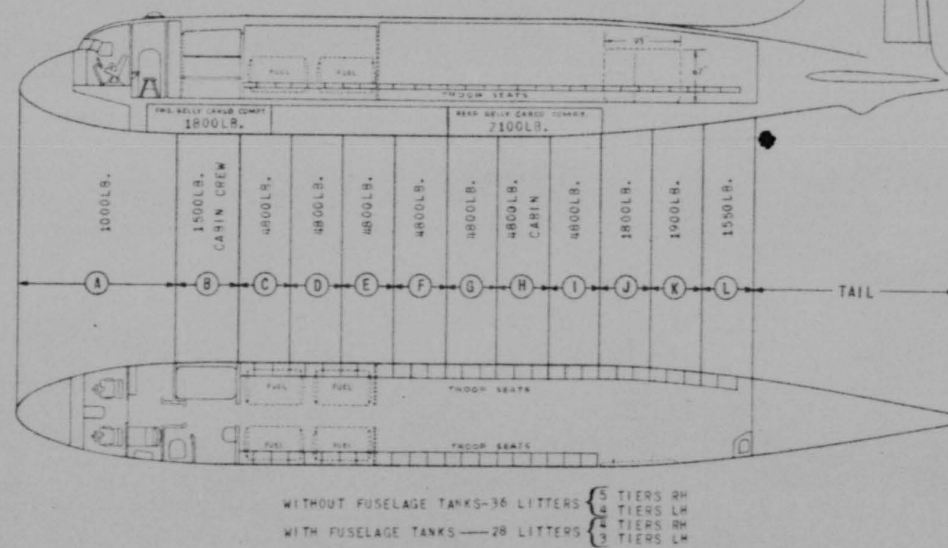
LOADING THE DOUGLAS "SKYMASTER"

ITEM	WEIGHT	STATION
JEEP 	3100 LB.	(C) THRU (L)
105 MM GUN & CAISSON 	GUN 4300 LB. CAISSON 4700 LB.	INTERNAL (C) THRU (L) EXTERNAL (E)
LITTERS 	3 TIER LITTER 50 LB. OXYGEN BOTTLE 138 LB.	(C) THRU (L)
37 MM GUN & MOTOR CHASSIS 	5500 LB.	(C) THRU (L)
75 MM GUN & CAISSON 	GUN 3400 LB. CAISSON 5000 LB.	INTERNAL (C) THRU (L) EXTERNAL (E)
LARGE ENGINE & MOUNT 	4900 LB.	(C) THRU (L)
LIGHT TANK 	15,500 LB.	EXTERNAL ONLY (E)

WEIGHT LEGEND

- ATTENDANT OR PASSENGER — 200 LB.
- TROOP AND EQUIPMENT — 240 LB.
- LITTER (INCL. PATIENT) — 250 LB.
- PARACAN — 250 LB.
- PARATROOPER — 260 LB.

LOADING STATIONS OF THE C-54



ANY COMBINATION OF CARGO CAN BE CARRIED BUT MUST SATISFY FOUR REQUIREMENTS: (1) Total weight. (2) Space limitations. (3) Center of gravity. (4) Floor loading. (Typical items are illustrated).

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TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART

MODEL & BLOCK-NO.	ENGINE & PROP.		SIZE	WEIGHT		COMBAT CREW	FUEL & OIL		CARGO OR PASSENGERS			RADIO	REMARKS & REFERENCE		
	NUMBER	ENGINE MFR. MODEL SUPERCHARGER PROP. MFR. TYPE	B.H.P./ALT.	S-SPAN L-LENGTH H-HEIGHT T-TREAD W-WING AREA	B-BASIC C-COMBAT W-WAR MAX. M-MAX. LAND		FUEL TANKAGE		STATION	CAPACITY	MAX. LOAD	STATION		PLACES	MAX. LOAD
			T-TAKE OFF W-WAR EMERG. M-MILITARY C-CONTINUOUS				TYPE OR LOCATION ALSO (MAX. OIL)	NO AND CAPACITY ALSO (MAX. FUEL)							
C-54A-DO -1 thru -5	4	PRATT-WHITNEY R-2000-7 2 SPEED HAMILTON STD. 13" DIA. 3 BL. F.F., HYDROMATIC	T 1350/ 3 L	S 117' 6" L 93' 10" H 27' 6" T 24' 8" W 1450 Sq. F.	B 37000 C 73000 W 87000* M 73000	6	INRD.-WINGS 2 x 490 OUTRD.-WINGS 2 x 420 FUSEL. (REMOVE) 4 x 450 (138)	27100 1800 2100 1500	32500	CABIN-WING BELLY-FORF BELLY-AFT BAGGAGE	TROOPS* 50 ^a or 60 ^b LITTERS ^b 36 ^b ATTENDANTS 6	12000	SCR-211 SCR-269 SCR-274 SCR-287 SCR-515 SCR-522 SCR-578 SCR-585 SCR-695 SCR-718 RC-32 RC-36 RC-43 RC-103 RC-198 NN-28 AN/AIC-3 AN/APN-4 AN/APN-9 AN/ARA-10 AN/ARC-3 AN/ARC-8 AN/ARC-9 AN/ARN-5 AN/ARN-7 AN/ARN-11 AN/ASA-1 AN/ASA-3 RC-1033	C-54A TECH. ORDER 01-40MM-1 (REV. 15 JAN. 1945) C-54B, DAE TECH. ORDER 01-40MS-1 (REV. 10 JAN. 1945) C-54G TECH. ORDER 01-40WU-1 (20 MAY 1945) (a) 50 TROOPS OR 36 LITTERS WITHOUT FUSELAGE TANKS. 30 TROOPS OR 28 LITTERS WITH FUSELAGE TANKS. (b) 49 TROOPS OR 36 LITTERS WITHOUT FUSELAGE TANKS. 41 TROOPS OR 25 LITTERS WITH FUSELAGE TANKS.	
C-54B-DO -1 thru -20			4												AS ABOVE
C-54B-DC -1	4	AS ABOVE		AS ABOVE	AS ABOVE	B 39400 C 73000 W 87000* M 73000	INRD.-WINGS 2 x 490 OUTRD.-WINGS 2 x 420 AUX. (AUX.) 2 x 350 (138)	2 x 490 1800 2100 1500	32500	AS ABOVE	TROOPS ^a 49 ^a or 60 ^b LITTERS ^b 36 ^b ATTENDANTS 6	11750	SCR-515 SCR-522 SCR-578 SCR-585 SCR-695 SCR-718 RC-32 RC-36 RC-43 RC-103 RC-198 NN-28 AN/AIC-3 AN/APN-4 AN/APN-9 AN/ARA-10 AN/ARC-3 AN/ARC-8 AN/ARC-9 AN/ARN-5 AN/ARN-7 AN/ARN-11 AN/ASA-1 AN/ASA-3 RC-1033	C-54B TECH. ORDER 01-40MS-1 (REV. 10 JAN. 1945) C-54G TECH. ORDER 01-40WU-1 (20 MAY 1945) (a) 50 TROOPS OR 36 LITTERS WITHOUT FUSELAGE TANKS. 30 TROOPS OR 28 LITTERS WITH FUSELAGE TANKS. (b) 49 TROOPS OR 36 LITTERS WITHOUT FUSELAGE TANKS. 41 TROOPS OR 25 LITTERS WITH FUSELAGE TANKS.	
C-54E-DO -1 thru -15			4												PRATT-WHITNEY R-2000-11 2 SPEED HAMILTON STD. 13" DIA. 3 BL. F.F., HYDROMATIC
C-54E-DC -1 thru -15	4	AS ABOVE		AS ABOVE	AS ABOVE	B 39400 C 73000 W 87000* M 73000	6	OUTRD.-WINGS 2 x 500 OUTRD.-WINGS 2 x 420 INRD. W. (AUX.) 2 x 350 (138)	2 x 500 1800 2100 1500	32500	WITH REMOVAL OF CABIN SEATS CARGO LOADING SAME AS FOR C-54A.	PERSONNEL 44	8800	SCR-515 SCR-522 SCR-578 SCR-585 SCR-695 SCR-718 RC-32 RC-36 RC-43 RC-103 RC-198 NN-28 AN/AIC-3 AN/APN-4 AN/APN-9 AN/ARA-10 AN/ARC-3 AN/ARC-8 AN/ARC-9 AN/ARN-5 AN/ARN-7 AN/ARN-11 AN/ASA-1 AN/ASA-3 RC-1033	
C-54G-DO -1 thru -15			4												PRATT-WHITNEY R-2000-9 2 SPEED HAMILTON STD. 13" DIA. 3 BL. F.F., HYDROMATIC
C-54J-DO -1	4	AS ABOVE		AS ABOVE	AS ABOVE	B 40000 C 73000 W 87000* M 73000	5	AS ABOVE	2 x 490 1800 2100 1500	32500	C-54J - WITH REMOVAL OF CABIN SEATS CARGO LOADING AS FOR C-54E.	PERSONNEL 44	8800	SCR-515 SCR-522 SCR-578 SCR-585 SCR-695 SCR-718 RC-32 RC-36 RC-43 RC-103 RC-198 NN-28 AN/AIC-3 AN/APN-4 AN/APN-9 AN/ARA-10 AN/ARC-3 AN/ARC-8 AN/ARC-9 AN/ARN-5 AN/ARN-7 AN/ARN-11 AN/ASA-1 AN/ASA-3 RC-1033	

MODEL & BLOCK-NO.	TAKE OFF & LANDING				HIGH SPEED & CLIMB				RANGE AND ENDURANCE										REMARKS						
	HARD SURFACE - NO WIND				CLEAN AIRPLANE AT NORMAL COMBAT WEIGHT				STATUTE AIR MILES - NO WIND - NO ALLOWANCE FOR RESERVE																
	GROSS WEIGHT	TO CLEAR 50'		LANDING SPEED	GROUND RUN		STD. ALT.	WAR EMERG. HIGH SPEED	MIL. POWER RATE OF CLIMB	MAX. CONTIN. POWER RATE OF CLIMB	TIME TO CLIMB	LOADING		MAX. CONTIN. at 10,000 FT.	LONG RANGE CRUISE										
T.O. DIST.		LAND DIST.	T.O. DIST.		LAND DIST.	WEIGHT						STANDARD	WAR EMERG. HIGH SPEED		MIL. POWER RATE OF CLIMB	MAX. CONTIN. POWER RATE OF CLIMB	TIME TO CLIMB	TAKE OFF WEIGHT	BOMBS CARGO	TOTAL FUEL	at 10,000 FT. RANGE	at 10,000 FT. ENDUR.	at 5,000 FT. RANGE	at 5,000 FT. ENDUR.	at 10,000 FT. RANGE
C-54A-DO -1 thru -5	40000	-	2000	90	1300	15000	-	-	36.0	440	28.7	52000	4000	3520	1850	7.0	4100	22.5	4175	21.1	4000	19.5	3800	18.3	(c) FIRST 5.0 HRS. OF FLIGHT INCLUDING CLIMB, ARE AT 15000 FT. ALT.
C-54A-DC -1 thru -15	50000	1900	2500	90	1300	10000	-	-	28.5	425	14.8	55000	4000	2730	1475	5.8	2725	14.5	2750	13.7	2700	12.9	2475	11.7	
C-54B-DO -1 thru -20	60000	3200	3200	95	1800	19000	270	685	22.7	540	8 7.0	59000	6000	1820	900	3.5	1900	10.2	2050	10.8	1850	8.9	1750	8.5	(d) FIRST 7.1 HRS. OF FLIGHT INCLUDING CLIMB, ARE AT 15000 FT. ALT.
C-54B-DC -1	65000	4100	-	-	2400	5000	270	685	22.7	540	8 7.0	59000	6000	1820	900	3.5	1900	10.2	2050	10.8	1850	8.9	1750	8.5	
C-54E-DO -1 thru -15	40000	-	2400	90	1400	20000	270	685	22.7	540	8 7.0	59000	6000	1820	900	3.5	1900	10.2	2050	10.8	1850	8.9	1750	8.5	(e) FIRST 3.4 HRS. OF FLIGHT INCLUDING CLIMB, ARE AT 15000 FT. ALT.
C-54E-DC -1	50000	2000	2900	90	1800	15000	270	685	22.7	540	8 7.0	59000	6000	1820	900	3.5	1900	10.2	2050	10.8	1850	8.9	1750	8.5	
C-54G-DO -1 thru -15	60000	3400	3500	95	2000	22000	270	685	22.7	540	8 7.0	59000	6000	1820	900	3.5	1900	10.2	2050	10.8	1850	8.9	1750	8.5	ABOVE PRACTICAL CEILING
C-54G-DC -1 thru -15	65000	4300	-	-	2500	5000	270	685	22.7	540	8 7.0	59000	6000	1820	900	3.5	1900	10.2	2050	10.8	1850	8.9	1750	8.5	
C-54J-DO -1	73000	5700	-	-	3300	10000	270	685	22.7	540	8 7.0	73000	21000	1840	600	3.3	1500	7.2	1475	7.2	1425	7.1	1425	7.1	ABOVE PRACTICAL CEILING
C-54J-DC -1	73000	5700	-	-	3300	10000	270	685	22.7	540	8 7.0	73000	21000	1840	600	3.3	1500	7.2	1475	7.2	1425	7.1	1425	7.1	

NOTES:

(A) SCR-211	FREQUENCY METER	NR-26	RADIO COMPASS
SCR-269	RADIO COMPASS	AN/AIC-3	INTERPHONE
SCR-274	COMMAND SET	AN/APN-4	LOGAN
SCR-287	LIGHTER SET	AN/APN-9	LOGAN
SCR-515	IDENTIFICATION EQUIP.	AN/ARA-10	PANEL CONTROL SYSTEM
SCR-522	COMMAND SET	AN/ARC-7	COMMAND SET
SCR-578	EMERGENCY TRANSMITTER	AN/ARC-8	LIGHT SET
SCR-585	IFF	AN/ARC-9	SET
SCR-695	IFF	AN/ARC-9	SET
SCR-718	IFF	AN/ARC-9	SET
RC-32	NOSE & ALTITUDE	AN/ARC-11	COMPASS
RC-36	FILTER EQUIPMENT	AN/ASA-3	STATIC DISCHARGE
RC-43	INTERPHONE	AN/ASA-3	STATIC DISCHARGE
RC-103	HARRIER SIGNAL	AN/ASA-3	STATIC DISCHARGE
RC-103	LOCALIZER	RC-103	WARRIOR M. A. M.
RC-103	FILTER EQUIPMENT		

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

* MILITARY POWER AVAILABLE FOR A SHORT TIME.



MANUFACTURED BY DOUGLAS (STEVEN HOPKINS) *90" & (C-54) *90"

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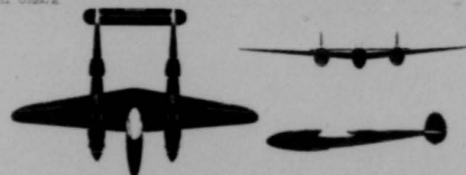
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TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART																
MODEL & BLOCK NO.	ENGINE & PROP.		SIZE		WT.	FUEL		ARMAMENT			BOMBS-CARGO-PASS.			RADIO	REMARKS & REFERENCE	
	NUMBER	ENGINE MFR.	B.H.P./ALT.	S-SPAN	B-BASIC	TANK TYPE OR LOCATION	NO. TANKS & CAPACITY U.S. GAL.	NO. GUNS & CALIBER	RDS PER GUN	LOCATION & TYPE	INTERNAL	EXTERNAL	MAX. LOAD LB.	TYPE		
		MODEL	T-TAKE-OFF	L-LENGTH	C-COMBAT						NO. & SIZE OR STATION	NO. & SIZE OR CAPACITY				
P-38F-LO	ALLISON 7-1710-45	1150/27000	37'11"	37'11"	13500	2 x 90	1-2000	150	NOSE-TYPE M1	NO	NO	NO	NO	NO	TECHNICAL ORDER 01-72-1. (REV. 30 SEPT. 1944) LIMITED TO 1150 HP. BECAUSE OF INADEQUATE COOLING.	
P-38F-LO -1 TO -15 INCL.	ALLISON 7-1710-45	1150/27000	37'11"	37'11"	13500	2 x 90	1-2000	150	NOSE-TYPE M1	NO	NO	NO	NO	NO	TECHNICAL ORDER 01-72-1. (REV. 30 SEPT. 1944) LIMITED TO 1150 HP. BECAUSE OF INADEQUATE COOLING.	
P-38G-LO -1 TO -15 INCL.	ALLISON 7-1710-45	1150/27000	37'11"	37'11"	13500	2 x 90	1-2000	150	NOSE-TYPE M1	NO	NO	NO	NO	NO	TECHNICAL ORDER 01-72-1. (REV. 30 SEPT. 1944) LIMITED TO 1150 HP. BECAUSE OF INADEQUATE COOLING.	
P-38H-LO -1 & -5	ALLISON 7-1710-45	1150/27000	37'11"	37'11"	13500	2 x 90	1-2000	150	NOSE-TYPE M1	NO	NO	NO	NO	NO	TECHNICAL ORDER 01-72-1. (REV. 30 SEPT. 1944) LIMITED TO 1150 HP. BECAUSE OF INADEQUATE COOLING.	

MODEL & BLOCK NO.	TAKE OFF & LANDING				HIGH SPEED & CLIMB				RANGE & ENDURANCE										REMARKS ON PERFORMANCE	
	HARD SURFACE - NO WIND				AT NORMAL COMBAT WEIGHT				STATUTE AIR MILES - NO WIND - NO ALLOWANCE FOR RESERVE											
	GROSS WEIGHT LB.	TO CLEAR 50 FT. DIST.	LANDING DIST.	LANDING SPEED MPH.	STD. ALT. FT.	MIL. POWER HP.	MAX. CONTIN. POWER HP.	TAKE OFF WEIGHT LB.	BOMBS CARGO LB.	TOTAL FUEL U.S. GAL.	MAX. CONTINUOUS POWER		MAX. CRUISE POWER		LONG RANGE					
P-38F-LO	13500	2700	3000	85	13500	2000	2100	15000	NOE	300	1200	1.2	125	1.2	700	2.1	675	2.1	900	1.1
P-38F-LO -1 TO -15 INCL.	13500	2700	3000	85	13500	2000	2100	15000	NOE	300	1200	1.2	125	1.2	700	2.1	675	2.1	900	1.1
P-38G-LO -1 TO -15 INCL.	13500	2700	3000	85	13500	2000	2100	15000	NOE	300	1200	1.2	125	1.2	700	2.1	675	2.1	900	1.1
P-38H-LO -1 & -5	13500	2700	3000	85	13500	2000	2100	15000	NOE	300	1200	1.2	125	1.2	700	2.1	675	2.1	900	1.1

NOTES:

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



P-38
"LIGHTNING"

MANUFACTURED BY LOCKHEED (Durbank) "14"

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TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART																
MODEL & BLOCK NO.	ENGINE & PROP.		SIZE	WT.	COMBAT CREW	FUEL		ARMAMENT			BOMBS-CARGO-PASS			RADIO	REMARKS & REFERENCE	
	ENGINE MFR. MODEL	PROP MFR. TYPE	B.H.P./ALT.	S-SPAN		B-BASIC	TANK TYPE OR LOCATION	NO. TANKS & CAPACITY U.S. GAL.	NO. GUNS & CALIBER	RDS PER GUN	LOCATION & TYPE	INTERNAL NO. & SIZE OR STATION	EXTERNAL NO. & SIZE OR CAPACITY	MAX. LOAD LB.		TYPE
P-39D-BE	ALLISON V-1710-35 SINGLE SPEED CURTISS 10'5" DIA. - 3BL. CONST. SPD. HYDR.	T 1150/S L M 1150/12000 C 1000/10800	5-34' 0" L-30' 2" H-11' 10" T-11' 4" W-213 SQ. FT.	6300 7650 9000	1	WING TOTALS DROOP-BELLY	12-120 1x75 or 1x156 or 1x175 295 TOT.	4-.30 2-.50 1-37MM	*1000 200 50	WING - FIXED NOSE - FIXED PROP. - TYPE M1	NONE	1-500 1-325 1-250 1-100	500	SCR-283	TECHNICAL ORDER 01-110FB-1. (REV. 20 SEPT. 1944)	
P-39D-BE -1	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	1	AS ABOVE	AS ABOVE	4-.30 2-.50 1-37MM	*1000 200 50	WING - FIXED NOSE - FIXED PROP. - TYPE M1	A S	A B O V E		SCR-274 or SCR-522A & SCR-995	TECHNICAL ORDER 01-110FB-1. (REV. 30 OCT. 1944)	
P-39D-BE -2	ALLISON V-1710-65 SINGLE SPEED CURTISS 10'5" DIA. - 3BL. CONST. SPD. HYDR.	T 1325/S L M 1150/12000 C 1000/10800	AS ABOVE	AS ABOVE	1	AS ABOVE	AS ABOVE	A S	A B O V E	A S	A B O V E	A S	A B O V E	AS ABOVE	A S A B O V E	
P-39F-BE	ALLISON V-1710-35 SINGLE SPEED ARMO PRODUCTS 10'5" DIA. - 3BL. CONST. SPD. HYDR.	T 1150/S L M 1150/12000 C 1000/10800	AS ABOVE	AS ABOVE	1	AS ABOVE	AS ABOVE	4-.30 2-.50 1-37MM	*1000 200 50	WING - FIXED NOSE - FIXED PROP. - TYPE M1	A S	A B O V E		AS ABOVE	TECHNICAL ORDER 01-110FB-1. (REV. 20 SEPT. 1944)	
P-39K-BE -1	ALLISON V-1710-65 SINGLE SPEED ARMO PRODUCTS 10'5" DIA. - 3BL. CONST. SPD. HYDR.	T 1325/S L M 1150/12000 C 1000/10800	AS ABOVE	AS ABOVE	1	AS ABOVE	AS ABOVE	A S	A B O V E	A S	A B O V E	A S	A B O V E	AS ABOVE	TECHNICAL ORDER 01-110FB-1. (REV. 30 OCT. 1944)	

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	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	ENDUR.	
P-39D-BE	6700	-	1850	82	-	1100	7650	25000	322	1390	332	#	11.0	8650	NONE	295	550	2.0	-	-	-	-	-	-	1100	5.5	ALL PERFORMANCE ESTIMATED
	7500	8900	2050	86	1800	1300		20000	312	1390	332	#	9.1	8600	NONE	276	525	1.8	-	-	-	-	-	-	1050	5.3	
	7800	3000	2100	88	2000	1350		15000	360	2000	343	#	6.1	8150	NONE	195	400	1.6	-	-	-	-	-	-	800	4.8	
	8150	3400	2200	91	2250	1400		10000	395	2450	343	#	3.9	7650	NONE	120	275	0.8	450	1.5	350	1.1	-	-	600	3.6	
	8650	4200	-	-	2600	-		5000	335	2550	323	#	1.3	8150	500	120	225	0.8	-	290	1.1	-	-	-	450	3.3	
P-39D-BE -1	AS ABOVE						AS ABOVE						AS ABOVE										AS ABOVE				
P-39D-BE -2	6700	-	1850	82	-	1100																					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:
 1. MAXIMUM P-39 MODELS MODIFIED FOR AIR/GROUND SUPPORT BY INSTALLATION OF CAMERAS, BELLY ARMOR, ETC.
 2. * 1000 RISE./MIN MAX. FOR GROUND STRAPPING; 300 RISE./MIN NORMAL.
 3. * MILITARY POWER AVAILABLE FOR 15 MINUTES



P-39
"AIRACOBRA"

MANUFACTURED BY BELL (Buffalo) "III"

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TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART															PAGE 21 AS OF: 23 FEB. 1945
MODEL & BLOCK NO.	NUMBER	ENGINE & PROP.		SIZE		WT.	COMBAT CREW	FUEL		ARMAMENT		BOMBS-CARGO-BASE		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 W-RECOGN. 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		
P-39L-BE	-1	1	ALLISON V-1710-65 SINGLE SPEED CURTISS 10'5" DIA. - 3BL. COMB. SPD. ELECT.	T 1325/8 L M 1150/12000 C 1000/10500	S 34' 0" L 30' 2" H 11' 10" T 11' 4" W 213 sq. ft.	B 6500 C 7900 W -	1	WING TOTALS 12-120 DROP.-BELLY 1x75 or 1x156 or 1x175 255 TOT.	2-50 4-30 2-50 1-37MM	300 200 30	WING - FIXED HOSE - FIXED PROP. - TYPE ML.	NONE	1-500 1-325 1-350 1-100	500	SCR-274N or SCR-522A & SCR-695 TECHNICAL ORDER 01-11079-1. (REV. 30 OCT. 1944)
P-39M-BE	-1	1	ALLISON V-1710-65 SINGLE SPEED CURTISS 10'5" DIA. - 3BL. COMB. SPD. ELECT.	T 1200/8 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	TECHNICAL ORDER 01-11079-1. (REV. 30 JULY 1944)
P-39N-BE	-0 TO -5 INCL.	1	ALLISON V-1710-65 (A) SINGLE SPEED AERO PRODUCTS 11'7" DIA. - 3BL. COMB. SPD. HYDR.	AS ABOVE	AS ABOVE	AS ABOVE	1	WING TOTALS 8-87 DROP.-BELLY 1x75 or 1x156 or 1x175 262 TOT.	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	TECHNICAL ORDER 01-11079-1. (REV. 25 OCT. 1944) * SCR-695 REPLACES SCR-535A ON P-39N-5 ONLY. ** 1st. 156 P-39N-0 BUILT-IN FUEL 120 GAL. KITS AVAILABLE 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**	2-50 2-50 1-37MM	300 300 30	WING - FIXED HOSE - FIXED PROP. - TYPE ML.	AS ABOVE	AS ABOVE	AS ABOVE	TECHNICAL ORDER 01-11079-1. (20 MARCH 1944) ** 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-1710-65 (A) SINGLE SPEED AERO PRODUCTS	AS ABOVE	AS ABOVE	AS ABOVE	1	WING TOTALS 12-120 DROP.-BELLY 1x75 or 1x156 or 1x175 255 TOT.	2-50 1-37MM	200 30	HOSE - FIXED PROP. - TYPE ML.	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. P-39Q-21 & -25 HAS 3 BLADED PROPELLER: 11'7" DIA.

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 T.O. DIST. FT.	LAND. DIST. FT.	WEIGHT LB.	STD. ALT. FT.	MIL. POWER		MAX. CONTIN. POWER		TAKE OFF WEIGHT LB.	BOMBS 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.						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
P-39L-BE	7000	-	1770	84	1750	1750	7000	25000	345	1200	345	12.8	9100	NONE	295	1.4	350	2.2	-	-	-	1075	3.4
	7500	-	1770	84	1750	1750	7500	20000	345	1200	345	12.8	8500	NONE	195	1.4	350	2.2	-	-	-	750	3.4
	7900	-	1770	84	1750	1750	7900	15000	345	1200	345	12.8	7900	NONE	120	1.4	350	2.2	-	-	-	750	3.4
	8500	-	1770	84	1750	1750	8500	10000	345	1200	345	12.8	8500	NONE	50	1.4	350	2.2	-	-	-	750	3.4
	9100	-	1770	84	1750	1750	9100	5000	345	1200	345	12.8	9100	NONE	180	1.4	350	2.2	-	-	-	750	3.4
P-39M-BE	7000	-	1770	84	1750	1750	7000	25000	370	1200	370	9.5											
	7500	-	1770	84	1750	1750	7500	20000	370	1200	370	9.5											
	7900	-	1770	84	1750	1750	7900	15000	370	1200	370	9.5											
	8500	-	1770	84	1750	1750	8500	10000	370	1200	370	9.5											
	9100	-	1770	84	1750	1750	9100	5000	370	1200	370	9.5											
P-39N-BE	6800	-	1770	84	1750	1750	6800	25000	387	1175	387	11.9	8750	NONE	262	1.4	350	2.2	-	-	-	975	3.4
	7600	-	1770	84	1750	1750	7600	20000	387	1175	387	11.9	8600	NONE	215	1.4	350	2.2	-	-	-	900	3.4
	8100	-	1770	84	1750	1750	8100	15000	387	1175	387	11.9	8500	NONE	162	1.4	350	2.2	-	-	-	825	3.4
	8700	-	1770	84	1750	1750	8700	10000	387	1175	387	11.9	8500	NONE	87	1.4	350	2.2	-	-	-	800	3.4
	8800	-	1770	84	1750	1750	8800	5000	387	1175	387	11.9	8500	NONE	50	1.4	350	2.2	-	-	-	800	3.4
P-39Q-BE																							
P-39Q-BE																							

NOTES:

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

* 1000 RPM./MIN. MAX. FOR GROUND STRAPING: 300 RPM./MIN. NORMAL.

ATTENTION:

KITS AVAILABLE IN SERVICE TO INCREASE BUILT-IN FUEL CAPACITY OF ALL P-39 & 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 INSTALL CONVENTIONAL QUADRANT IN P-39-10 THRU P-39Q-30 ON AIRPLANE ALLOCATED TO AAF. P-39Q-30 THRU P-39Q-30 HAVE AN AUTOMATIC SPEED-BOOST CONTROL.

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



P-39
"AIRACOBRA"

MANUFACTURED BY BELL (Buffalo) "B"

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TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART																
MODEL & BLOCK NO.	ENGINE & PROP.		SIZE	WT.	COMBAT CREW	FUEL		ARMAMENT			BOMBS-CARGO-PASS.		RADIO	REMARKS & REFERENCE		
	ENGINE MFR. MODEL	B.H.P./ALT.				TANK TYPE OR LOCATION	NO. TANKS & CAPACITY	NO. GUNS & CALIBER	RDS PER GUN	LOCATION & TYPE	INTERNAL NO. & SIZE OR STATION	EXTERNAL NO. & SIZE OR CAPACITY		MAX. LOAD L.B.	TYPE	
P-40E & E-1 -CU	ALLISON W-1710-39 SINGLE SPEED CURTISS 11'0" DIA. - 3EL. CONST. SPD. ELECT.	T 1150/8 L M 1150/11700 C 1000/10800	S 37'4" L 31'9" H 12'4" T 8'2" W 236 sq. ft.	B 6900 C 8400 A-10000 W -	1	REAR - WING FRONT - WING MUSLAZE DROG. - BELLY	1 x 52 1 x 37 1 x 52 1 x 52	6-.50	281 [average]	WING - FIXED	NONE	1-500 & 2-100 or 6-20. 1-325 1-850 1-100	700	SCR-285 or SCR-274H	TECHNICAL ORDER 01-2507-1. (REV. 10 SEPT. 1944) * NO EXTERNAL WING BOMBS ON EARLY MODELS. * WITHOUT RAM.	
P-40F-CU -I TO -20 INCL.	PACARD W-1650-1 SINGLE STG. - 2 SPD CURTISS 11'0" DIA. - 3EL. CONST. SPD. ELECT.	T 1300/8 L M 1240/11500 C 1080/9500 1010/16000	S 37'4" L 33'4" H 12'4" T 8'2" W 236 sq. ft.	B 7000 C 8500 A-10000 W -	1	REAR - WING FRONT - WING MUSLAZE DROG. - BELLY	1 x 54 1 x 37 1 x 52 1 x 52, 75 150 or 170	4-.50	201 [average]	A B O V E	A S A B O V E	A S A B O V E	AS ABOVE	SCR-274H or SCR-522A & SCR-695	TECHNICAL ORDER 01-2508-1 (20 SEPT. 1944) REVISED * P-40F-1 LENGTH SAME AS P-40F. ALL SUBSEQUENT MODELS HAVE EXTENDED MUSLAZE.	
P-40K-CU -I TO -15 INCL.	ALLISON W-1710-73 SINGLE SPEED CURTISS 11'0" DIA. - 3EL. CONST. SPD. ELECT.	T 1325/8 L M 1150/11800 C 1000/11000	AS ABOVE	B 6950 C 8400 A-10000 W -	1	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	TECHNICAL ORDER 01-2508-1 (15 OCT. 1944) REV. * P-40K-1 & -5 LENGTH SAME AS P-40E. ALL SUBSEQUENT MODELS HAVE EXTENDED MUSLAZE. * WITHOUT RAM.	
P-40L-CU -I TO -20 INCL.	PACARD W-1650-1 SINGLE STG. - 2 SPD CURTISS 11'0" DIA. - 3EL. CONST. SPD. ELECT.	T 1300/8 L M 1240/11500 C 1080/9500 1010/16000	AS ABOVE	B 7000 C 8500 A-10000 W -	1	REAR - WING FRONT - WING MUSLAZE DROG. - BELLY	1 x 54 1 x 37 1 x 52 1 x 52, 75 150 or 170	4-.50	201 [average]	WING - FIXED	A S A B O V E	A S A B O V E	AS ABOVE	AS ABOVE	TECHNICAL ORDER 01-2508-1 (REV. 20 SEPT. 1944) * P-40L-1 FUEL AND ARMAMENT SAME AS P-40F SERIES.	
P-40M-CU -I TO -10 INCL.	ALLISON W-1710-81 SINGLE SPEED CURTISS 11'0" DIA. - 3EL. CONST. SPD. ELECT.	T 1200/8 L M 1125/11700 C 1000/16400	AS ABOVE	B 6950 C 8400 A-10000 W -	1	REAR - WING FRONT - WING MUSLAZE DROG. - BELLY	1 x 54 1 x 37 1 x 52 1 x 52, 75 150 or 170	6-.50	281 [average]	WING - FIXED	A S A B O V E	A S A B O V E	AS ABOVE	AS ABOVE	TECHNICAL ORDER 01-2508-1. (REV. 15 OCT. 1944)	

MODEL & BLOCK NO.	TAKE OFF & LANDING						HIGH SPEED & CLIMB						RANGE & ENDURANCE										REMARKS ON PERFORMANCE			
	HARD SURFACE - NO WIND						AT NORMAL COMBAT WEIGHT						STATUTE AIR MILES - NO WIND - NO ALLOWANCE FOR RESERVE													
	TO CLEAR 50'		GROUND-RUN		LANDING SPEED		WEIGHT	STD. ALT.	MIL. POWER		MAX. CONTIN. POWER		TAKE OFF WEIGHT	BOMBS CARGO-PASS.	TOTAL FUEL	MAX. CONTINUOUS POWER		MAX. CRUISE POWER		LONG RANGE						
P-40E & E-1 -CU	7500	-	1398	84	-	950			25000	-	-	265				520	18.2	9100	NONE	201	485	1.5	-	-	675	2.7
	8100	2600	1700	98	1600	1990	20000	330	980	300	11.5	11.5	8700	NONE	119	325	1.3	-	-	585	2.0	-	-	650	3.0	
	8700	3400	-	-	1990	-	10000	345	2170	513	7.6	7.6	9200	500	119	300	1.1	-	-	450	1.9	-	-	575	2.8	
	9100	4300	-	-	2300	-	5000	335	2100	296	4.4	2.4	-	-	-	-	-	-	-	-	-	-	-	-	-	
	9500	-	-	-	2300	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
P-40F-CU -I TO -20 INCL.	7500	-	-	-	-	-	25000	350	1000	-	500	18.5	10000	NONE	327	-	-	-	-	-	-	-	-	1500	7.2	
	8850	-	-	-	-	-	20000	364	1100	320	1000	11.6	9350	NONE	232	-	-	-	-	-	-	-	-	-	-	
	9200	-	-	-	-	-	15000	352	1650	332	1500	7.6	9200	NONE	209	-	-	-	-	-	-	-	-	-	-	
	9350	-	-	-	-	-	10000	340	2210	320	80	4.5	8850	NONE	157	-	-	-	-	-	-	-	-	-	-	
	9550	-	-	-	-	-	5000	320	2160	300	4	2.4	9550	700	157	-	-	-	-	-	-	-	-	-	-	
P-40K-CU -I TO -15 INCL.	7500	-	1700	81	-	1050	25000	-	-	265	350	18.5	10000	NONE	327	-	-	-	-	-	-	-	-	-	-	
	8800	2950	1950	-	1800	1300	20000	330	1100	300	11.2	11.2	9300	NONE	232	500	1.7	-	-	900	3.5	-	-	1000	5.0	
	9150	3150	2000	-	1900	1350	15000	352	1650	312	7.5	7.5	9150	NONE	209	100	1.4	-	-	750	3.1	-	-	900	4.3	
	9300	3200	2050	-	1950	1400	10000	342	2000	313	5.9	5.9	8800	NONE	157	350	1.1	-	-	600	2.2	-	-	700	3.1	
	9500	3350	2100	-	2050	-	5000	320	2100	296	4	2.4	9500	700	157	300	1.1	-	-	550	2.2	-	-	600	3.0	
P-40L-CU -I TO -20 INCL.	SUBSTANTIALLY SAME AS P-40F						8500	SUBSTANTIALLY SAME AS P-40F						10000	NONE	327	-	-	-	-	-	-	-	1900	7.2	P-40L-1 ONLY, SAME AS P-40F SERIES.
	9750	NONE	291	-	-	-		9300	NONE	232	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	9100	NONE	195	-	-	-		8600	NONE	120	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	8600	NONE	120	-	-	-		8100	NONE	70	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
	9100	NONE	120	-	-	-		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
P-40M-CU -I TO -10 INCL.	7500	-	-	-	-	-	25000	353	850	330	11.7	11.7	10000	NONE	327	650	2.3	-	-	1200	5.0	-	-	1150	7.6	
	8600	-	-	-	-	-	20000	360	1500	335	10.2	10.2	9300	NONE	232	150	1.6	-	-	900	3.8	-	-	1000	5.0	
	8800	-	-	-	-	-	15000	361	2025	334	7.3	7.3	8800	NONE	157	385	1.0	-	-	600	2.3	-	-	700	3.3	
	9300	-	-	-	-	-	10000	346	2150	320	4.5	4.5	9300	700	157	-	-	-	-	-	-	-	-	-	-	
	10000	-	-	-	-	-	5000	328	2070	308	4	2.4	-	-	-	-	-	-	-	-	-	-	-	-	-	

NOTES:

* MILITARY POWER AVAILABLE FOR 5 MINUTES ONLY.
* MILITARY POWER AVAILABLE FOR 15 MINUTES.

P-40
"WARHAWK"

MANUFACTURED BY CURTISS (Buffalo) "CO"

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TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART																										
MODEL & BLOCK NO.	ENGINE & PROP.		SIZE		WT.	COMBAT CREW	FUEL		ARMAMENT			BOMBS-CARGO-PASS		RADIO	REMARKS & REFERENCE											
	ENGINE MFR. MODEL SUPERCHARGER PROP MFR. TYPE	B.H.P./ALT. T-TAKE-OFF M-MILITARY C-CONTINUOUS	S-SPAN L-LENGTH H-HEIGHT T-TREAD W-WING AREA	B-BASIC C-COMBAT W-RECOIL W-WAR MAX			TANK TYPE OR LOCATION	NO. TANKS & CAPACITY U.S. GAL.	NO. GUNS & PER CALIBER	RDS PER GUN	LOCATION & TYPE	INTERNAL NO. & SIZE OR STATION	EXTERNAL NO. & SIZE OR CAPACITY			MAX. LOAD LB.	TYPE									
																		18	19	20	21	22	23	24	25	26
P-40N-CU -1	1	ALLISON V-1710-81 SINGLE SPEED CURTISS 11'0" DIA. - 3 BL. CONST. SPD. ELECT.	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 W -	1	REAR - WING FUSELAGE 1 x 54 DROPP. - BELLY 1 x 70	1 x 54 1 x 68 1 x 70 1 x 75, 150 or 170	4-.50	201 (average)	WING - FIXED	NONE	1-500 & 2-100 or 6-20. 1-325 1-250 1-100	900	SCR-271N or SCR-522A & SCR-695	TECHNICAL ORDER 01-25CN-1. (15 JAN. 1945) * PROVISIONS FOR RACES ONLY.										
P-40N-CU -5 TO -15 INCL.	1	AS ABOVE	AS ABOVE	AS ABOVE	B 6700 C 8400 W -	1	REAR - WING FUSELAGE 1 x 54 DROPP. - BELLY 1 x 70	1 x 54 1 x 37 1 x 70 1 x 75, 150 or 225 * 511 TWT.	6-.50	281 (average)	WING - FIXED	NONE	1-500 & 2-500 or 1-200 or 6-20. 1-325 1-250 1-100	1500	AS ABOVE	REFERENCE AS ABOVE * PROVISIONS FOR 2-225 GAL. FIGHTING 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. BOMB										
P-40N-CU -20 THRU -30	1	ALLISON V-1710-99 * SINGLE SPEED CURTISS 11'0" DIA. - 3 BL. CONST. SPD. ELECT.	AS ABOVE	AS ABOVE	AS ABOVE	1	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	NOB-271L, SUB-522A & SCR-695. NB-25 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 -30 INCORPORATE A MANIFOLD PRESS. MODIFIER.									
P-40N-CU -35		AS ABOVE	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	AS ABOVE	* STARTING WITH -35 AUTOMATIC SPEED BOOST CONTROL IS BEING DISCONTINUED. TECHNICAL ORDER 01-25CN-1. (15 JAN. 1945)									
P-40N-CU -40		ALLISON V-1710-115 SINGLE SPEED CURTISS 11'0" DIA. - 3 BL. CONST. SPD. ELECT.	AS ABOVE	AS ABOVE	AS ABOVE	1	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	TECHNICAL ORDER 01-25CN-1. (15 JAN. 1945)									

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'		LANDING SPEED		GROUND-RUN		STD. ALT. FT.	MIL. POWER		MAX. CONTIN. POWER		TAKE OFF WEIGHT LB.	BOMBS CARGO PASSES 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.	LAND. MPH	T.O. DIST. FT.	LAND. DIST. FT.	WEIGHT LB.	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	RANGE MILES	ENDUR. HOURS		
P-40N-CU -1	7000	-	1650	92	-	1000	25000	332	1225	313	#	12.4	8550	NONE	292	600	2.0	-	-	1050	4.4	-	-	1250	6.7		
	7725	2150	1750	96	1350	1100	20000	346	1850	330	#	9.1	8250	NONE	197	380	1.4	500	1.9	760	3.2	-	-	850	3.4		
	8250	2550	1750	105	1700	1100	15000	348	2400	333	#	6.7	7725	NONE	122	230	0.8	290	1.1	430	1.7	-	-	520	2.5		
	8425	3100	1850	-	1800	1150	10000	331	2525	315	#	4.1	8225	500	122	210	0.8	260	1.1	420	1.8	-	-	480	2.3		
	8850	3500	-	-	1950	-	5000	313	2425	297	#	2.1															
P-40N-CU -5 TO -15 INCL.	7000	-	1650	98	-	1000	25000	325	900	306	#	13.0	11100	NONE	611	1250	4.4	-	-	2250	9.8	-	-	2800	14.1		
	8400	2700	1850	100	1650	1200	20000	340	1550	325	#	8.8	9500	NONE	331	675	2.3	-	-	1250	5.4	-	-	1550	7.6		
	8900	3550	1850	109	2050	1200	15000	342	2150	328	#	6.0	8900	NONE	236	470	1.6	600	2.3	930	3.9	-	-	1080	5.1		
	9100	3800	1900	-	2200	1250	10000	325	2230	310	#	4.7	8400	NONE	161	320	1.1	400	1.4	600	2.3	-	-	750	3.5		
	9500	4200	-	-	2250	-	5000	308	2120	291	#	2.4	8900	500	161	300	1.1	370	1.4	590	2.5	-	-	-	-		
P-40N-CU -20 THRU -30		AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE		AS ABOVE	AS ABOVE	AS ABOVE																	
P-40N-CU -35, -40		AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE		AS ABOVE	AS ABOVE	AS ABOVE																	

NOTES:

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

P-40
"WARHAWK"

MANUFACTURED BY CURTISS (Buffalo) "CU"

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TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART																	
MODEL & BLOCK NO.	ENGINE & PROP.			SIZE		WT.		COMBAT CREW	FUEL		ARMAMENT			BOMBS-CARGO-PASS.		RADIO	REMARKS & REFERENCE
	NUMBER	ENGINE MFG. MODEL SUPERCHARGER PROP MFG. TYPE	B.H.P./ALT. T-TAKE-OFF M-MILITARY C-CONTINUOUS	S-SPAN L-LENGTH H-HEIGHT T-TREAD W-WING AREA	B-BASIC C-COMBAT A-REC-LIM W-WAR MAX	TANK TYPE OR LOCATION	NO. TANKS & CAPACITY U.S. GAL.		NO. GUNS & PER GUN	RDS PER GUN	LOCATION & TYPE	INTERNAL NO. & SIZE OR STATION	EXTERNAL NO. & SIZE OR CAPACITY	MAX. LOAD LB.	TYPE		
																NO. & SIZE	
P-47C-RE -1 TO -5 P-47D RE & RA -1 TO -21 P-47G-CU -1 TO -18	1	PRATT-WHITELEY R-2800-21, 59, -65 TURBO CURTISS 12" DIA. - LBL. CONST. SPD. HYDRO	T 2000/3 L M 2000/27000 C 1525/29000	S 50'9" L 36'1" H 11'2" T 15'6" W 300 SQ. FT.	B 10700 C 13500 A 15000	1	MAIN - FUS. 1x200 AUX. - FUS. 1x100 DROF. - BELLY 1x 75 or 2x150 EXT. - WINGS 2x150 & BELLY 1x 75	1x200 1x100 1x 75 or 2x150 2x150 & 1x 75	357 HOR. 425 MAX.	WING - FIXED	None	2-1000 3- 500 ^b 3- 250 3- 100 E (a)	2500	None	TECHNICAL ORDER 01-0580-1 (REV. 10 FEB. 1945) * P-47D-6 thru-11 & P-47D-10 & -15 CARRY BELLY BRACKLE ONLY. * 500 LB. BOMB MAX. SIZE IN BELLY POSITION. * ONLY EARLY MODELS HAVE 200 GAL. DEFERRABLE BELLY TANK. * P-47D-10 & SUBSEQ. HAVE SAME CRITICAL ALTITUDE AS BELLY TANK. * TREAT AS DEFERRABLE.		
P-47D-RE -22	1	PRATT-WHITELEY R-2800-59 TURBO HAMILTON STD. 13" DIA. - LBL. CONST. SPD. HYDRO	T 2000/3 L M 2000/33000 C 2300/31000	AS ABOVE EXCEPT FOR 14'7" HEIGHT	AS ABOVE	1	A	S	A	B	U	V	E		REFERENCE AS ABOVE		
P-47D-RA -23	1	PRATT-WHITELEY R-2800-59 TURBO CURTISS 13" DIA. - LBL. CONST. SPD. HYDRO	AS ABOVE	AS ABOVE	B 10500 C 11000 A 17000 W -	1	A	S	A	B	U	V	E		REFERENCE AS ABOVE		
P-47D-RE -25	1	PRATT-WHITELEY R-2800-59 TURBO HAMILTON STD. 13" DIA. - LBL. CONST. SPD. HYDRO	AS ABOVE	AS ABOVE	B 10700 C 11600 A 17500 W -	1	MAIN - FUS. 1x270 AUX. - FUS. 1x100 DROF. - BELLY 1x 75 or 1x110 EXT. - WINGS 2x150 & BELLY 1x110	1x270 1x100 1x 75 or 1x110 2x150 & 1x110	A	C	A	B	U	V	E	TECHNICAL ORDER 01-0580-1a (REV. 5 MARCH 1945)	
P-47D-RA -26	1	PRATT-WHITELEY R-2800-59 TURBO CURTISS 13" DIA. - LBL. CONST. SPD. HYDRO	AS ABOVE	AS ABOVE	B 10600 C 11500 A 17500 W -	1	A	S	A	B	U	V	E		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.	STD. ALT.	WAR EMERG. HIGH SPEED	MIL. POWER RATE OF CLIMB	MAX. CONTIN. POWER HIGH SPEED	TIME OF CLIMB	TAKE OFF WEIGHT	BOMBS CARGO PASS.	TOTAL FUEL	MAX. CONTINUOUS POWER		MAX. CRUISE POWER			LONG RANGE											
LB.	FT.	FT.	MPH	FT.	FT.	FT.	MPH	FT/MIN.	MPH	FT/MIN.	MPH	FT/MIN.	MIN.	LB.	LB.	U.S. GAL.	RANGE ENDUR.	RANGE ENDUR.	RANGE ENDUR.	RANGE ENDUR.	RANGE ENDUR.	RANGE ENDUR.	MILES	HOURS	MILES	HOURS	MILES	HOURS	MILES	HOURS	
P-47C-RE -1 TO -5 P-47D RE & RA -1 TO -21 P-47G-CU -1 TO -18	11000	-	2800	100	2000	1700	30000	435	1375	120	-	360	600	20.0	16200	None	660	1000	2.7	2.7	-	-	-	-	2795	1.0	-	-	-	-	NO RANGE WITH BOMBS AVAILABLE.
P-47D-RE -22	12500	3100	2800	100	2000	1700	25000	421	1525	116	1750	375	15.0	15600	None	605	1000	2.8	2.8	-	-	-	-	1525	1.0	-	-	-	-	AS ABOVE	
P-47D-RA -23	13000	3200	2800	100	2100	1600	20000	406	2110	100	2050	366	11.0	11900	None	505	1000	2.8	2.8	-	-	-	-	1095	1.0	-	-	-	-	AS ABOVE	
P-47D-RE -25	13500	3300	2800	100	2300	1800	15000	390	2100	98	2200	390	7.2	11300	None	425	1000	1.8	1.8	-	-	-	-	1095	1.0	-	-	-	-	AS ABOVE	
P-47D-RA -26	14000	3400	2800	100	2300	1800	10000	372	2650	96	2300	335	4.3	11100	None	300	1000	1.8	1.8	-	-	-	-	1095	1.0	-	-	-	-	AS ABOVE	

NOTES: (a)

R-2800-21 (WATER INJECTION PROVIDED; KITS AVAILABLE FOR INSTALLATION).

R-2800-59 (WATER INJECTION & NEW ELECTRICAL SYSTEMS).

R-2800-65 (WATER INJECTION INSTALLED).

SEE FIGURE 10 FOR PERFORMANCE DATA - CRUISE SPEEDS AFTER 15 MIN. CLIMB.

* MILITARY POWER AVAILABLE FOR 15 MINUTES.



P-47
"THUNDERBOLT"

MANUFACTURED BY REPUBLIC (Farmingdale) "RE"; DOWNSVILLE "DA" & CURTISS (Indyale) "CU"

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TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART

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DATE: 29 MAY 1945

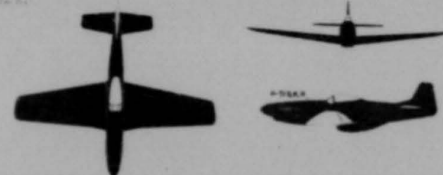
MODEL & BLOCK NO.	ENGINE & PROP.		SIZE		WT.	COMBAT CREW	FUEL		ARMAMENT			BOMBS - EXTERNAL		RADIO	REMARKS & REFERENCE		
	ENGINE MFR. MODEL	B.H.P./ALT.	S-SPAN	L-LENGTH			T-TAKE-OFF	TANK TYPE OR LOCATION	NO. TANKS & CAPACITY U.S. GAL.	NO. GUNS & CALIBER	RDS PER GUN	LOCATION & TYPE	INTERNAL NO. & SIZE			EXTERNAL NO. & SIZE	MAX. LOAD LB.
P-51D-NA -5 to -25 P-51D-NT -5 to -20	1	PACARD Y-1650-7 2 STAGE HAMILTON STD. 11" DIA. - 48L. CONST. SPD. HYDRO.	T 1150/3 L we 1295/20900 M 1150/24000 C 1150/25500 1150/27000 980/23000	S 37' 0" L 32' 3" H 13' 8" T 11' 10" W 233 sq. ft.	B 7639 C 10100	1	MAIN-R. WING MAIN-L. WING FUELSLAGE DROG.-WINGS	1 x 92 1 x 92 1 x 85 2 x 75 or 2 x 110 475 TOT.	2) 2) 2) 2) 2)	270 270 400 400	OUTED.-WINGS CENTER-WINGS INBD.-WINGS ALTERNATE INSTALLATION OUTED.-WINGS INBD.-WINGS	NONE	2-1000 2-500 2-325 2-250 2-100	2000 SKE (r)	TECHNICAL ORDER 01-6047-1. (REV. 20 DEC. 1944.) (r) ZERO LENGTH RAIL ROCKETS INSTALLED ON LAST 1100 P-51D-25-NA & SUBSEQUENT. EFFECTIVE POINT NOT YET ESTABLISHED ON P-51D-NT MODELS. (6) ROCKETS WITH BOMBS OR EXTERNAL DROG. TANKS or (10) ROCKETS WITHOUT BOMBS OR EXTERNAL DROG. TANKS.		
P-51X-NT -1 to -15																* THEATER MODIFICATION.	
P-51H-NT	1	PACARD Y-1650-9 2 STAGE MEGACORROUS 11" DIA. - 48L. CONST. SPD. HYDRO.	T 1250/3 L we 1315/20900 M 1170/21500 C 1150/22000 1150/22100 980/23000	S 37' 0" L 33' 4" H - T 11' 1" W 235 sq. ft.	B 7040 C 9500	1	MAIN-R. WING MAIN-L. WING FUELSLAGE DROG.-WINGS or	1 x 105 1 x 100 1 x 50 2 x 75 2 x 110 475 TOT.	2) 2) 2) 2) 2)	270 270 400 400	OUTED.-WINGS CENTER-WINGS INBD.-WINGS ALTERNATE INSTALLATION OUTED.-WINGS INBD.-WINGS	SAME AS P-51D-NT PLUS FOLLOW- ING ZERO RAIL ROCKET INSTALL. (6) WITH BOMBS OR DROG. TANKS, or (10) WITHOUT BOMBS OR DROG. TANKS	AN/ARC-3 9GR-955A 90-1206 AN/ASA-8 AN/APS-13	TECHNICAL ORDER 01-6047-1. (15 FEB. 1945) *WAR EMERGENCY RATINGS ARE WITH WATER INJECTION AND AN-F-33 FUEL. (MANIFOLD PRESSURE 90" HG.)			

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				
	GROSS WEIGHT LB.	TO CLEAR 50'		LANDING SPEED MPH	GROUND-RUN		WEIGHT LB.	STD. ALT. FT.	WAR EMERG.		MIL. POWER		MAX. CONTIN. POWER		TAKE OFF WEIGHT LB.	BOMBS 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.	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.	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	RANGE MILES	ENDUR. HOURS	RANGE MILES	ENDUR. HOURS	RANGE MILES		ENDUR. HOURS	RANGE MILES	ENDUR. HOURS	RANGE MILES
P-51D (Y-1650-7)	8000	-	2200	95	-	1200	30000	135	1500	433	1300	413	#	12.6	11600	NONE	499	1500	4.6	1650	4.6	-	-	-	-	2080	6.5	HIGH SPEED & CLIMB SHOWN WITHOUT RACKS; RACKS OR ROCKET HAND- LES INCREASE HIGH SPD. 5 to 6 MPH.	
	9000	2200	2500	100	1500	1100	25000	137	1900	426	1390	406	#	9.5	11100	NONE	419	1270	3.9	1410	3.9	-	-	-	-	1830	7.7		
	9800	2400	2600	110	1750	1050	20000	128	2675	412	1225	326	#	7.3	10100	NONE	269	870	2.4	950	2.4	-	-	1050	2.8	1300	5.0		
	10500	2650	-	-	1900	-	15000	113	2775	413	1200	347	#	6.2	11100	1000	269	790	2.4	870	2.4	-	-	-	-	1150	4.6		
P-51X-NT -1 to -15	10800	2900	-	-	2050	-	10000	116	2925	415	1225	340	#	5.3	12100	2000	269	775	2.4	840	2.5	-	-	900	2.8	1070	4.3	PERFORMANCE SLIGHTLY LESS THAN SHOWN ABOVE	
	11800	3400	-	-	2350	-	5000	826	3175	321	1100	310	#	1.7															
P-51H-NT							30000	125	1650	411	1395	424	#	11.9	11000	NONE	475	1325	4.0	1475	4.0	1675	5.0	-	-	2080	6.5	HIGH SPEED & CLIMB SHOWN WITHOUT RACKS; RACKS OR ROCKET HAND- LES INCREASE HIGH SPD. 5 to 6 MPH. (WAR EMERG. SPEED WITH 90" HG.)	
							25000	127	1600	415	1300	392	#	7.0	10500	NONE	405	1190	3.4	1375	3.4	1290	5.0	-	-	1725	7.2		
							20000	120	1500	437	1250	377	#	5.0	9500	NONE	255	790	2.4	800	2.4	900	2.7	975	2.8	1175	4.9		
							15000	123	1500	419	1250	378	#	3.0	10500	1000	255	875	2.3	785	2.4	825	2.8	875	2.8	1008	4.3		
							10000	123	1600	420	1200	367	#	1.8	11500	2000	255	875	2.1	675	2.1	800	2.2	825	2.8	980	4.0		
							5000	124	1330	340	1250	332	#	1.8															

NOTES:

WAR EMERGENCY AND MILITARY POWER AVAILABLE FOR 15 MINUTES.



P-51
"MUSTANG"

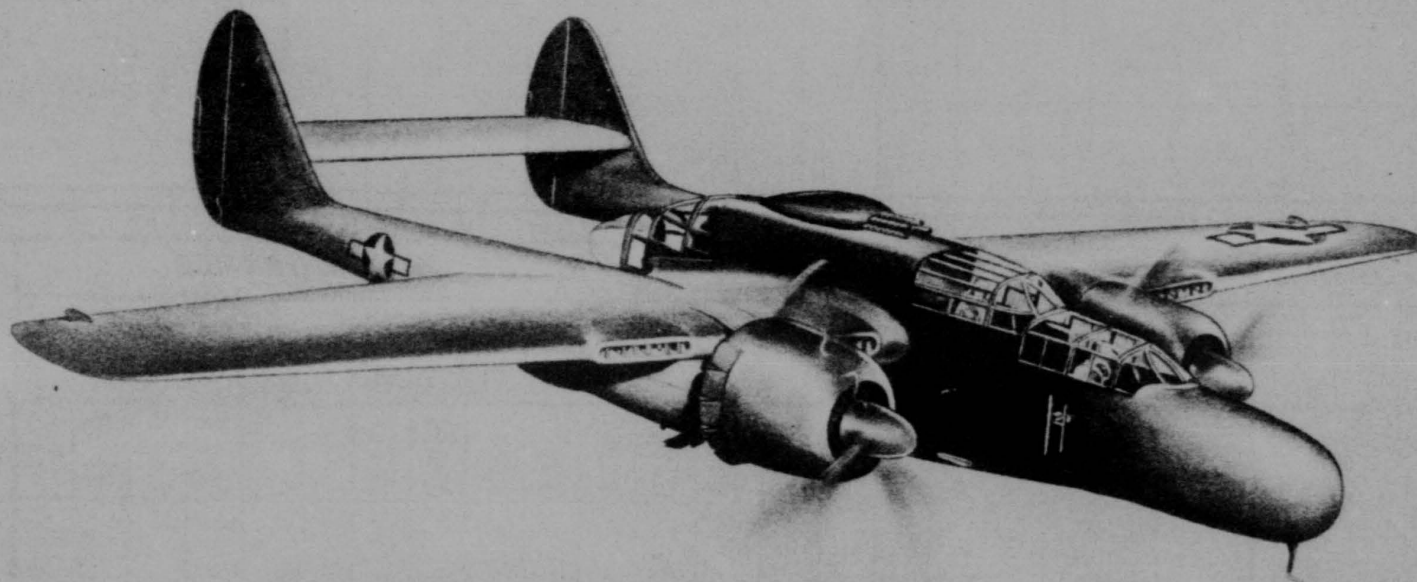
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AS OF:
23 FEB. 1945



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TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART																
MODEL & BLOCK NO.	ENGINE & PROP.		SIZE	WT.	COMBAT CREW	FUEL		ARMAMENT			BOMBS-CARGO-PASS.			RADIO	REMARKS & REFERENCE	
	NUMBER	ENGINE MFG. MODEL SUPERCHARGER PROP. MFG. TYPE	B.H.P./ALT.	S-SPAN		B-BASIC	TANK TYPE OR LOCATION	NO. TANKS & CAPACITY U.S. GAL.	NO. GUNS & CALIBER	RDS. PER GUN	LOCATION & TYPE	INTERNAL	EXTERNAL	MAX. LOAD LB.		TYPE
			T-TAKE-OFF	L-LENGTH		C-COMBAT						NO. & SIZE OR STATION	NO. & SIZE OR CAPACITY			
P-61A-NO -1	2	PRATT-WHITELEY R-2800-10 2 SPD. - 2 STG. CURTISS 12" DIA. - 4 BL. P.F. ELECTRIC	1850/81. 2000/2500 1760/26600 1600/2200 1650/17500	56' 14' 11" 17' 2"	22300 27600	INRD. - WING 2 x 115 OUTRD. - WING 2 x 200	630 TOT.	4-20mm 200 4-50 560	200	FORE-FUSELAGE UPPER TURRET	5 0 3 8	2-1600 f 2-1000 2-500 2-325 2-250 2-100	AS ABOVE	SCR-502(2) SCR-695 SCR-720 SCR-729 SCR-735 SCR-740 SCR-745 SCR-746 SCR-747	TECHNICAL ORDER 01-1578-1 (10 FEB. 1945) UPPER TURRET ON 1st. (37) P-61A-1's ONLY. CREW OF (3) FOR MODELS WITH TOP TURRET. THEATER MODIFICATION.	
P-61A-NO -5, -10 & -11 P-61B-NO -1, -2, -5, -6, -11	2	PRATT-WHITELEY R-2800-55 2 SPD. - 2 STG. CURTISS 12" DIA. - 4 BL. P.F. ELECTRIC	AS ABOVE PLUS THREE WAR EMERG. RATINGS 2250/1500 2060/13000 1925/11500	AS ABOVE	22300 26000	INRD. - WING 2 x 115 OUTRD. - WING 2 x 200 EXT. - WING 2x165 or 2x310*	1250 TOT.	4-20mm 200	200	FORE-FUSELAGE	NONE	2-1600 f 2-500 2-325 2-250 2-100	AS ABOVE PLUS AN/APN-13 & SCR-718 or AN/APN-1	TECHNICAL ORDER 01-1578-1. (10 FEB. 1945) TWO EXTERNAL WING TANKS OF 2-1600 LB. BOMBS CAN BE CARRIED ON P-61A-11; P-61B-2, -5 & -11 ONLY. THE 310 GAL. EXTERNAL FUEL TANKS ARE PRESSURIZED.		
P-61B-NO -10	2	AS ABOVE	AS ABOVE	AS ABOVE	22300 26000	INRD. - WING 2 x 115 OUTRD. - WING 2 x 200 EXT. - WING 2x165 or 2x310*	1250 TOT.	4-20mm 200	200	FORE-FUSELAGE	NONE	2-1600 f 2-1000 2-500 2-325 2-250 2-100	AS ABOVE	TECHNICAL ORDER 01-1578-1. (10 FEB. 1945) FOUR EXTERNAL WING TANKS OF 1-1600 LB. BOMBS CAN BE CARRIED. THE 310 GAL. EXTERNAL FUEL TANKS ARE PRESSURIZED.		
P-61B-NO -15, -16, -20, -25	2	AS ABOVE	AS ABOVE	AS ABOVE	25450 29700	AS ABOVE EXCEPT P-61B-15 CARRIES ONLY (2) EXTERNAL WING TANKS.	1670 TOT.	4-20mm 200 4-50 560	200	FORE-FUSELAGE UPPER TURRET	AS ABOVE EXCEPT P-61B-16 HAS ONLY (2) EXTERNAL BOMB STATIONS.	2-1600 f 2-1000 2-500 2-325 2-250 2-100	AS ABOVE PLUS AN/APN-1	TECHNICAL ORDER 01-1578-1. (10 FEB. 1945) P-61B-20 HAS NEW G.E. TURRET & FIRE CONTROL SYSTEM. P-61B-25 HAS AN/APN-1 RADAR SYNCHRONIZED WITH TOP TURRET FOR AUTOMATIC FIRE CONTROL.		

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 LB.	TO CLEAR 50'		GROUND-RUN		STD. ALT. FT.	WAR EMERG. HIGH SPEED M.P.H.	MIL. POWER RATE OF CLIMB FT/MIN.	MIL. POWER HIGH SPEED M.P.H.	MAX. CONTIN. POWER RATE OF CLIMB FT/MIN.	HIGH SPEED M.P.H.	RATE OF CLIMB FT/MIN.	TIME TO CLIMB MIN.	TAKE OFF WEIGHT LB.	BOMBS CARGO 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.												AT 10000 FT.	AT 25000 FT.	AT 10000 FT.	AT 25000 FT.	RANGE MILES	ENDUR. HOURS	RANGE MILES		ENDUR. HOURS	RANGE MILES	ENDUR. HOURS
		P-61A-NO -1	21000	2550	2050												1100	25000	360	1040	360	1040	360		10.0	11.0	27600
P-61A-NO -5, -10 & -11 P-61B-NO -1, -2, -5, -6, -11	25000	2900	2300	1700	20000	356	1275	356	1275	355	10.1	11.1	32000	NONE	1250	365	1.2	415	1.3	500	2.7	-	-	1900	5.6	AS ABOVE	
P-61B-NO -10	25000	2900	2300	1700	20000	356	1275	356	1275	355	10.1	11.1	32000	NONE	1250	365	1.2	415	1.3	500	2.7	-	-	1900	5.6	AS ABOVE	
P-61B-NO -15, -16, -20, -25	29700	352	2220	1680	25000	352	800	352	800	357	12.0	12.0	36000	NONE	1870	360	1.2	410	1.3	785	2.7	-	-	1350	5.9	AS ABOVE	

NOTES:

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



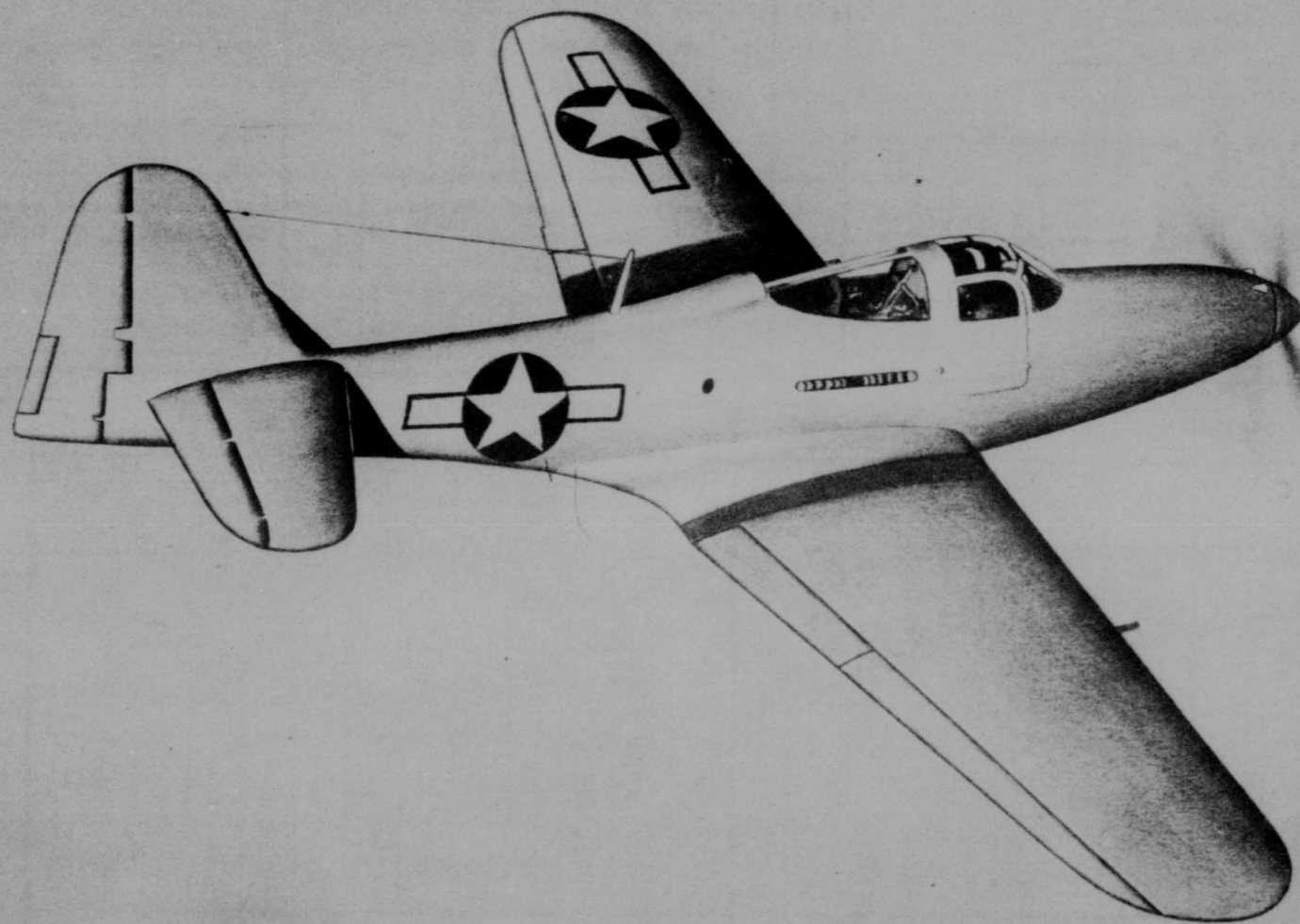
P-61
"BLACK WIDOW"

MANUFACTURED BY NORTHROP (HAWTHORNE) "50"
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PAGE 40
AS OF:
25 JAN. 1945



BELL P-63A

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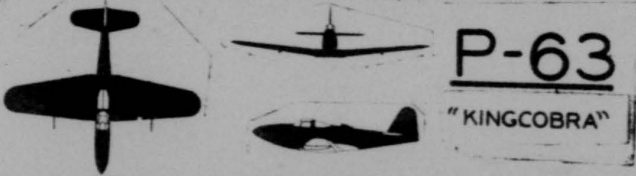
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TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART																
MODEL & BLOCK NO.	ENGINE & PROP.		SIZE		WT.	COMBAT CREW	FUEL		ARMAMENT			BOMBS - CARGO - PASS.		RADIO	REMARKS & REFERENCE	
	ENGINE MFR. MODEL	B.H.P./ALT.	S-SPAN	E-BASIC	TANK		NO. TANKS	NO. GUNS	RDS	LOCATION	INTERNAL	EXTERNAL	MAX. LOAD	TYPE		
NUMBER	SUPERCHARGER PROP. MFR. TYPE	T-TAKE-OFF M-MILITARY C-CONTINUOUS	L-LENGTH H-HEIGHT T-TREAD W-WING AREA	C-COMBAT W-WAR MAIL	OR LOCATION	NO. & CAPACITY U.S. GAL.	& CALIBER	PER GUN	& TYPE	NO. & SIZE OR STATION	NO. & SIZE OR CAPACITY	LB.				
P-63A-BE -1 TO -7 INCL.	1	ALLISON V-1710-93 2 STAGE ARROPRODUCTS 11'7" DIA. - 1/2 L. CONST. SPD. HYDRO.	1345 / S L	5 38' 1/2" L 32' 8" H 12' 3" T 14' 7" W 216 SQ. '.	B 6925 C 8350	1	MAIN - WINGS 2 x 68 DROPP. - BELLY 1 x 75 or 1 x 175 & DROPP. - WINGS 2 x 75 (See f)	1-37mm 30 2-50 250	PROP. - TYPE M1 WING - FIXED NOSE - FIXED	NONE	1-500 f 1-325 f 1-250 f 1-100 f	500 or 1500	SCR-271M A MC-198 or SCR-522 & HYDRA 138 & SCR-665	TECHNICAL ORDER 01-110FP-1. (10 FEB. 1945) f INTERNAL WING TAKES or BOMBS ADDED TO P-63A-6 & SUBSEQUENT WING EMERGENCY RATING.		
P-63A-BE -8, -9, -10	1	ALLISON V-1710-93 2 STAGE ARROPRODUCTS 11'0" DIA. - 1/2 L. CONST. SPD. HYDRO.	AS ABOVE	AS ABOVE	AS ABOVE	1	MAIN - WINGS 2 x 63 DROPP. - BELLY 1 x 64 or 1 x 75 & DROPP. - WINGS 2 x 75 (See f)	1-37mm (58* 30) 2-50 250	PROP. - TYPE M10 PROP. - TYPE M1 WING - FIXED NOSE - FIXED	NONE	3-500 3-325 3-250 3-100	1500	AS ABOVE	REFERENCE AS ABOVE * TYPE M10 ORANGE ON P-63A-9 & SUBSEQUENT MODELS. f PROVISIONS FOR 1x64 GAL. SELF SEALING BELLY TANK.		
P-63C-BE -1	1	ALLISON V-1710-117 2 STAGE ARROPRODUCTS 11'0" DIA. - 1/2 L. CONST. SPD. HYDRO.	AS ABOVE	AS ABOVE	AS ABOVE	1	MAIN - WINGS 2 x 61 DROPP. - BELLY 1 x 64 or 1 x 75 & DROPP. - WINGS 2 x 75 (See f)	1-37mm (58* 30) 2-50 200	PROP. - TYPE M10 PROP. - TYPE M1 WING - FIXED NOSE - FIXED	A S	A B C D V E	AS ABOVE	TECHNICAL ORDER 01-110FP-1. (BEING PRINTED) f PROVISIONS FOR 1x64 GAL. SELF SEALING BELLY TANK. (w) WAR EMERGENCY RATING: * 1500 HP. AT S.L. WITHOUT WATER INJECTION; ** 1500 HP. AT S.L. WITH WATER INJECT.			
P-63E-BE -1 CANCELLED	1	ALLISON V-1710-109 2 STAGE ARROPRODUCTS 11'6" DIA. - 1/2 L. CONST. SPD. HYDRO.	AS ABOVE	AS ABOVE	AS ABOVE	1	MAIN - WINGS 2 x 63 DROPP. - BELLY 1 x 75 or 1 x 64 & DROPP. - WINGS 2 x 75 or 2 x 110 (See f)	AS ABOVE PLUS: (2) 3 TUB-CLUSTER ROCKET PROJECTORS UNDER WINGS.	A S A B O V E	A S A B O V E	AS ABOVE	AS ABOVE	TECHNICAL ORDER 01-110FP-1. (BEING PRINTED) ** ALL HP. RATINGS WITHOUT RAM. (w) WAR EMERGENCY RATING.			

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						
	TO CLEAR 50'		GROUND RUN			STD. ALT.	WAR EMERG.		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.	FT.		HIGH SPEED	RATE OF CLIMB	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.				
	LB.	FT.	FT.	FT.	FT.	FT.	M.P.H.	FT./MIN.	M.P.H.	FT./MIN.	M.P.H.	FT./MIN.	MIN.	LB.	U.S. GAL.	RANGE	ENDUR.	RANGE	ENDUR.	RANGE		ENDUR.	RANGE	ENDUR.			
P-63A-BE -1 TO -7 INCL.	7700	1700	1800	115	1100	1150	30000	324	1680	324	1680	250	10500	NONE	451	920	2.9	-	-	-	-	-	-	2200	7.7	PERFORMANCE SHOWN WITHOUT EXTERNAL TANKS.	
P-63A-BE -8, -9, -10	8900	2150	-	-	1300	-	25000	421	2350	421	2350	345	9500	NONE	301	875	1.9	-	-	-	-	-	-	-	1800	5.0	AS ABOVE
P-63C-BE -1	8700	2500	-	-	1500	-	20000	398	3050	398	3050	370	8850	NONE	201	875	1.9	-	-	-	-	-	-	-	1150	5.0	AS ABOVE
P-63E-BE -1 CANCELLED	9500	2600	-	-	2000	-	15000	397	3590	372	3542	332	8350	NONE	126	850	1.1	-	-	-	-	-	-	-	750	3.0	AS ABOVE
	10500	4200	-	-	2500	-	10000	373	3815	355	3690	335	8350	NONE	126	850	1.1	-	-	-	-	-	-	-	750	3.0	AS ABOVE
							5000	356	3920	336	3575	315	8850	500	126	850	1.1	-	-	-	-	-	-	-	650	2.8	AS ABOVE

NOTES:

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



P-63
"KINGCOBRA"

MANUFACTURED BY BRILL (Buffalo) "BE"

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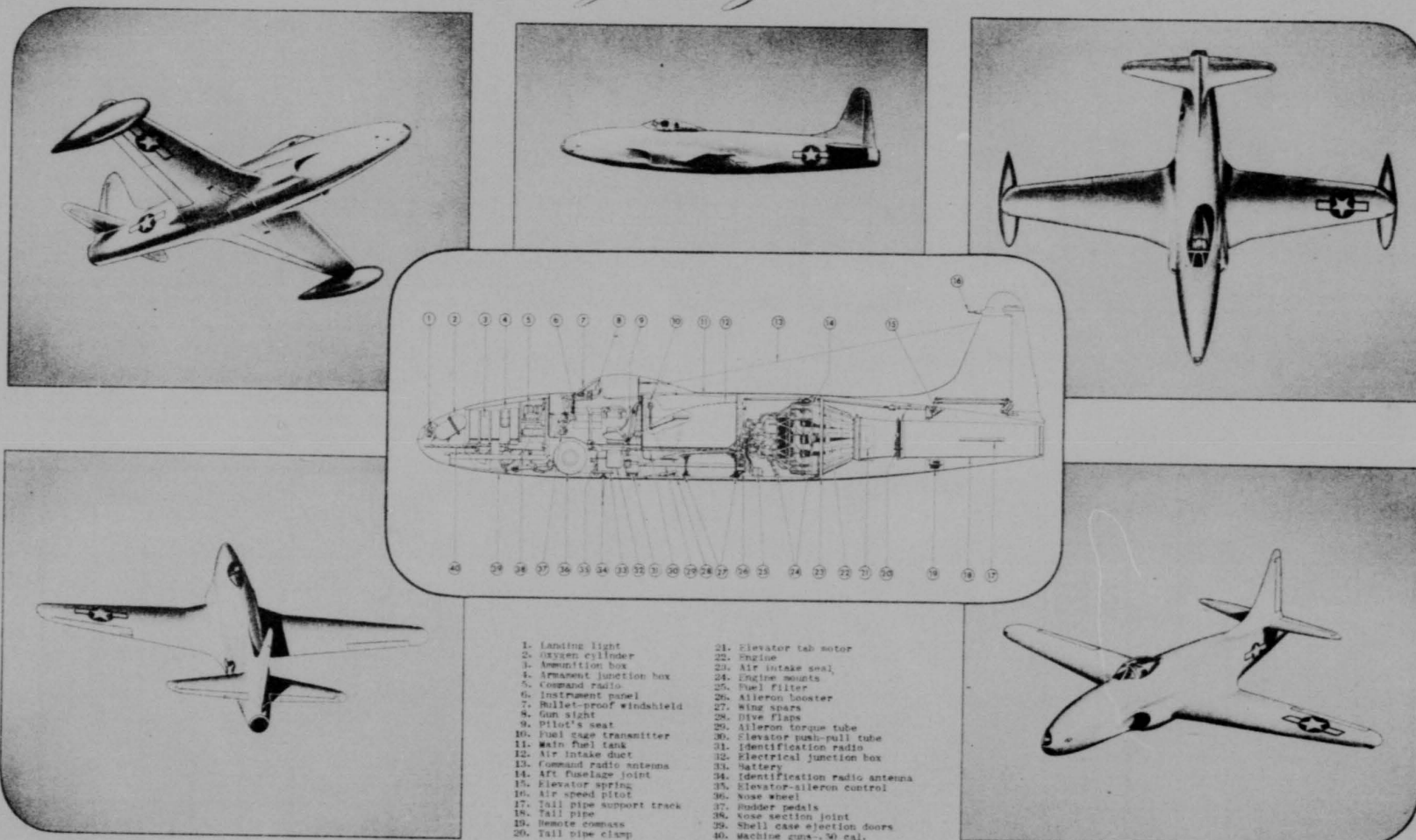
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Page 42
As of:
18 April 1945

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LOCKHEED P-80A

Shooting Star



- | | |
|-----------------------------|----------------------------------|
| 1. Landing light | 21. Elevator tab motor |
| 2. Oxygen cylinder | 22. Engine |
| 3. Ammunition box | 23. Air intake seal |
| 4. Armament junction box | 24. Engine mounts |
| 5. Command radio | 25. Fuel filter |
| 6. Instrument panel | 26. Aileron booster |
| 7. Bullet-proof windshield | 27. Wing spars |
| 8. Gun sight | 28. Dive flaps |
| 9. Pilot's seat | 29. Aileron torque tube |
| 10. Fuel gauge transmitter | 30. Elevator push-pull tube |
| 11. Main fuel tank | 31. Identification radio |
| 12. Air intake duct | 32. Electrical junction box |
| 13. Command radio antenna | 33. Battery |
| 14. Aft fuselage joint | 34. Identification radio antenna |
| 15. Elevator spring | 35. Elevator-aileron control |
| 16. Air speed pitot | 36. Nose wheel |
| 17. Tail pipe support track | 37. Rudder pedals |
| 18. Tail pipe | 38. Nose section joint |
| 19. Remote compass | 39. Shell case ejection doors |
| 20. Tail pipe clamp | 40. Machine gun--M cal. |

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TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART																	
MODEL & BLOCK NO.	ENGINE			SIZE		WT.	COMBAT CREW	FUEL		ARMAMENT			BOMBS-CARGO-PASS		RADIO	REMARKS & REFERENCE	
	NUMBER	ENGINE MFR. MODEL TYPE	% MAX. R.P.M.	S-SPAN	B-BASIC	TANK TYPE OR LOCATION		NO. TANKS & CAPACITY U.S. GAL.	NO. GUNS & CALIBER	RDS PER GUN	LOCATION & TYPE	INTERNAL	EXTERNAL	MAX. LOAD LB.	TYPE		
			T-TAKE-OFF M-MILITARY C-CONTINUOUS	L-LENGTH H-HEIGHT T-TREAD W-WING AREA	C-COMBAT W-WAR MAX							NO. & SIZE STATION	NO. & SIZE CAPACITY				
P-80A-10 -1	1	GENERAL ELECTRIC I-10-9 or -11 GAS TURBINE JET PROPULSION UNIT	T 100% R.P.M. M 100% R.P.M. C 96% R.P.M.	S 39' L 34'6" H 11'4" T 8'9" W 238 SQ. FT.	B 8000 C 11700 W 11000	1	FUSelage MAIN-WINGS L.E. WINGS R.C.P. WINGS	1 x 207 2 x 65 2 x 65 2 x 155 715 TOT.	6- .50	300	None	None	2-1000 2-500 2-250 2-100	2000	AN/APC-3, RC-95, RC-1206	TECHNICAL ORDER 01-75FJA-1. (25 APRIL 1945) (1) USABLE FUEL IS APPROX. 310 GAL. (DROPPABLE). DUE TO DESIGN CHANGES IN EARLY P-80A-1-10, INTERNAL FUEL VARIES FROM 125 to 170 GAL.; PRODUCTION ARTICLES IS SHOWN.	
			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												
			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						HIGH SPEED & CLIMB								RANGE & ENDURANCE								REMARKS	
	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.	WAR EMERG.	MIL. POWER	MAX. CONTIN. POWER	TAKE OFF WEIGHT	BOMBS-CARGO-PASS.	TOTAL FUEL	MAX. CONTINUOUS POWER				MAX. RANGE						
	T.O. DIST.	LAND. DIST.	LAND. SPEED	T.O. DIST.	LAND. DIST.	HIGH SPEED								RATE OF CLIMB	HIGH SPEED	RATE OF CLIMB	HIGH SPEED	RATE OF CLIMB	TIME TO CLIMB	at 25000		at 35000		at 25000
LB.	FT.	FT.	MPH	FT.	FT.	FT.	MPH	FT./MIN.	MPH	FT./MIN.	MPH	FT./MIN.	MIN.	RANGE MILES	END HRS	RANGE MILES	END HRS	RANGE MILES	END HRS	RANGE MILES	END HRS			
P-80A-10 -1	9000	-	2900	120	-	1400	10000 35000 50000 25000 20000 15000 10000 5000 S L		492	1160	650	-	-	11000	None	715	955	1.9	1200	2.7	1080	2.7	1500	3.4
	12000	1600	4150	115	3500	2050			508	1250	500	#	12.5											
	11000	6950	-	-	5300	-			521	2450	510	#	7.5											
									533	2260	515	#	7.4											
									542	3270	515	#	5.5											
									548	3700	508	#	5.6											
									554	4130	502	#	2.4											
									558	4560	498	#	1.2											
													0.0											

NOTES:

(A) RANGE IS BASED ON 50 GAL. ALLOWANCE FOR TAXI AND TAKE-OFF. CLIMB TO ALTITUDE AT 100% R.P.M. FOR ALLOWABLE TIME.

RED FIGURES ARE PRELIMINARY. SUBJECT TO REVISION AFTER FLIGHT CHECK.
* MILITARY R.P.M. AVAILABLE FOR 15 FIGURES.



P-80
"SHOOTING STAR"

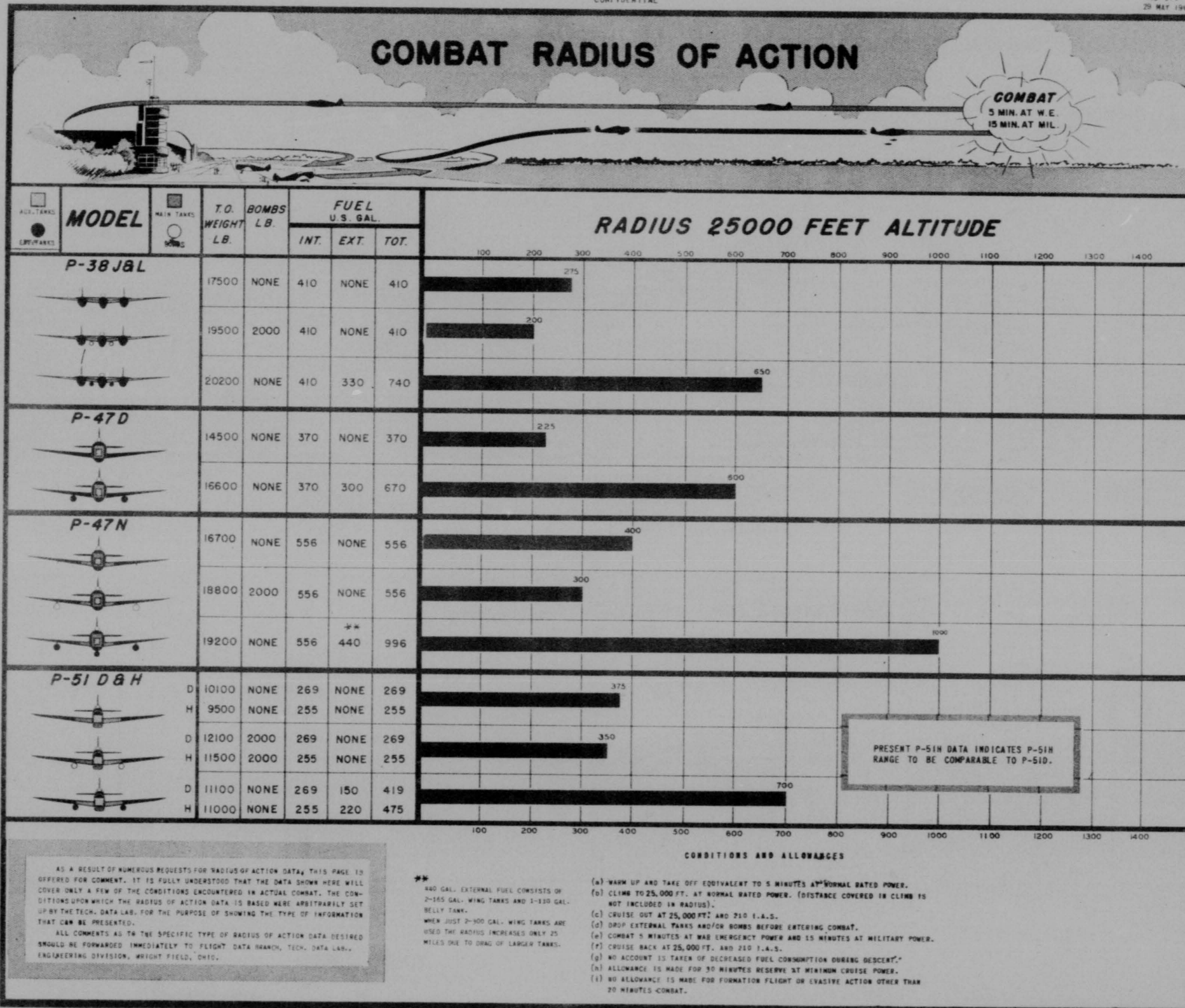
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PAGE 42 B
45 OF:
29 MAY 1960

COMBAT RADIUS OF ACTION

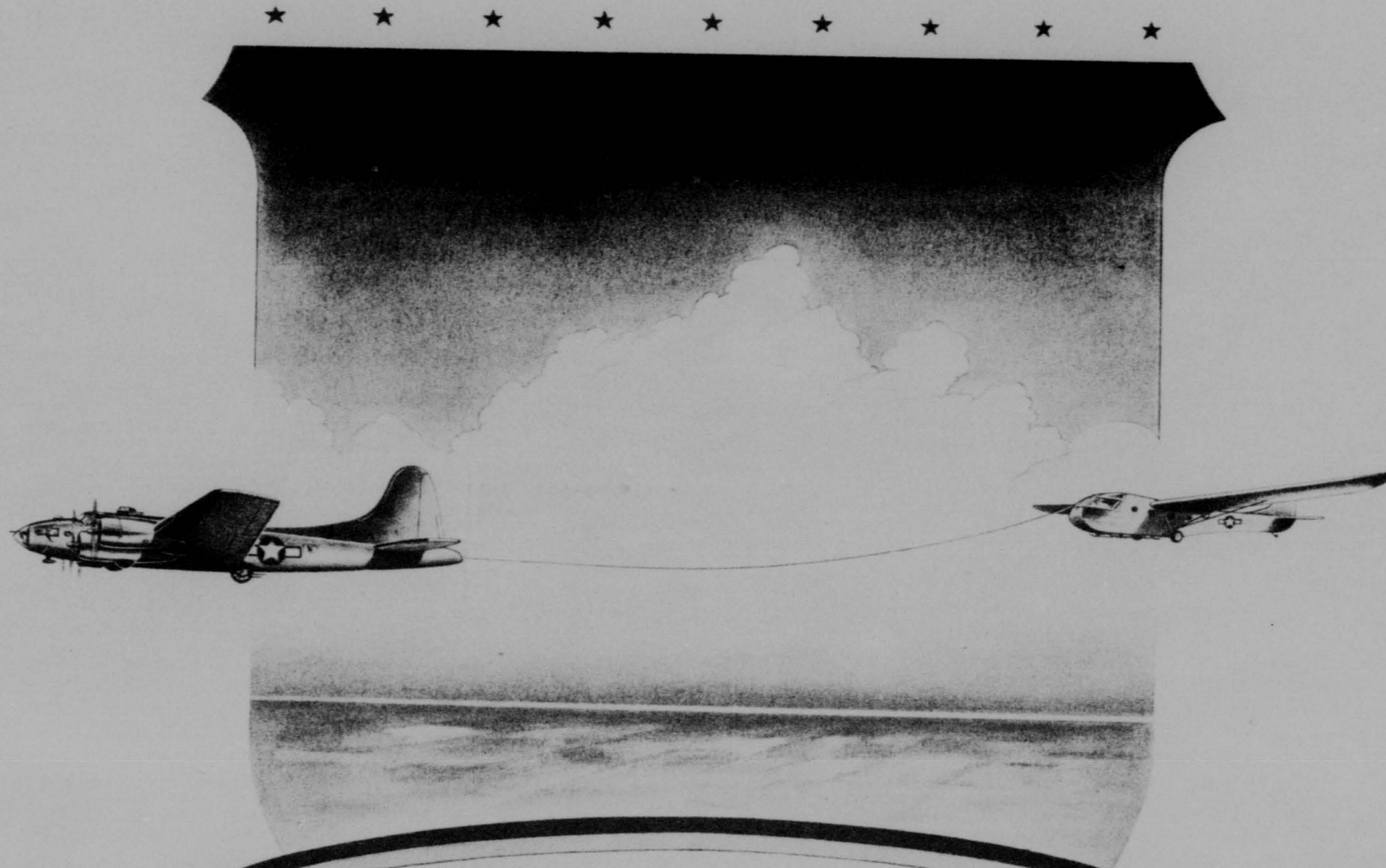
COMBAT
5 MIN. AT W.E.
15 MIN. AT MIL.



RED INDICATES PRELIMINARY DATA.

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**GLIDER AND
TOWPLANE SECTION**

JUNE - 1945

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PAGE 44
AS OF:
25 JAN. 1945

FOREWORD

WARNING

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 and endurance 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 allowances for wind, assured reserve, combat, nor formation flight.

RED PRINT: Preliminary estimates or calculated data.

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DEFINITIONS

LOADING:	Typical loadings of glider and towplane for tactical missions.
Note:	Weight and fuel quantities shown apply to all performances values to the right on the same line.
Max. tow speed:	Maximum permissible calibrated indicated air speed for towing glider at weight shown.
TAKE OFF: (To clear 50' object)	Distances representative of minimum airport requirements.
Take off speed:	Normal for average pilot. (Towplane I.A.S.)
Ground run:	Distances representative of minimum runway requirements.
CLIMB (I.A.S. for climb)	Minimum towplane indicated air speed for good control & satisfactory engine cooling.
Initial rate of climb:	Sea level rate of climb at minimum towplane indicated air speed.
Note:	For some combinations rate of climb tends to increase up to critical altitude of towplane.
Service ceiling:	Altitude at which rate of climb is 100'/min
Time to service ceiling:	Time to climb in minutes from sea level to service ceiling based on I.A.S. for climb.
RANGE & ENDURANCE:	(See discussion under foreword)
Radius of action:	Distance glider can be towed and released with towplane having enough fuel to return to base alone.
Time out:	Time from take off to release of glider, (At recommended cruising altitude).
Time back:	Time required for towplane to return to base alone at recommended cruising speed and altitude.
Max. range & endurance:	Practical maximum range which glider can be towed under conditions set forth and corresponding time required.

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TOWPLANE & GLIDER TACTICAL PLANNING PERFORMANCE CHART

PAGE 95
AS OF:
23 FEB. 1945

BOMBER TOWPLANE AND CG-4A GLIDER

TOWPLANE & GLIDER COMBINATION	LOADING						TAKE OFF (WITH GLIDER ATTACHED) SL-HARD SURFACE-NO WIND			CLIMB (AT MINIMUM TOW SPEED)				RANGE & ENDURANCE STATUTE AIR MILES-NO WIND-NO RESERVE MAXIMUM						REMARKS
	GLIDERS		TOWPLANE				TO CLEAR 50' OBJ. DISTANCE (FT.)	TAKE OFF SPEED I.A.S. (M.P.H.)	GROUND RUN DISTANCE (FT.)	I.A.S. FOR CLIMB (M.P.H.)	INITIAL RATE OF CLIMB (FT./MIN.)	SERVICE CEILING (FT.)	TIME TO SERVICE CEIL. (MIN.)	RADIUS OF ACTION (GLIDER RELEASED AT RADIUS)			RECOMM. CRUISING ALTITUDE (FT.)	MAX. RANGE (WITH GLIDER)		
	TAKE-OFF WEIGHT (LB.)	CARGO OR PASS. (LB.)	TAKE-OFF WEIGHT (LB.)	BOMBS CARGO OR PASS. (LB.)	FUEL (U.S. GAL.)	MAX. TOW SPEED (M.P.H.)								RADIUS (MI.)	TIME OUT (HRS.)	TIME BACK (HRS.)		RANGE (MI.)	ENDUR. (HRS.)	
	(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	6100	110	4150	135	300	12000*	37	(990)	6.8	6.0	5000	1380	9.1	* LIMITED- NO OXYGEN IN GLIDER
														(980)	6.3	5.5	10000	1370	8.8	
B-17F & (2) CG-4A	7500	3800	52500	NONE	1700	150	6300	110	4200	135	300	11000	57	510	3.4	3.1	5000	720	4.8	NOTE: THE 59100 LB. LOADING WITH (2) GLIDERS IS FOR EMERGENCY RELEASE ONLY.
	7500	3800	59100	NONE	2780	150	7150	110	4700	135	240	8000	44	860	6.0	5.2	5000	1140	7.9	
B-24D & (1) CG-4A	7500	3800	52500	NONE	2344	150	4200	115	3450	140	530	12000*	24	(870)	5.7	4.7	5000	1360	8.8	* LIMITED- NO OXYGEN IN GLIDER
	7500	3800	59000	6000	2344	150	5050	115	4100	140	325	12000*	41	(830)	5.6	4.1	10000	1280	7.8	
B-25C & (1) CG-4A	7500	3800	30000	2000	972	150	5050	120	4150	140	390	12000*	38	540	3.4	3.0	5000	700	3.8	* LIMITED- NO OXYGEN IN GLIDER NOTE: LOADINGS SHOWN ARE FOR PROVISIONAL RELEASE ONLY.

NOTES:


- (1) REFERENCE MATERIAL FROM TECHNICAL ORDER 01-1-143 dated 20 DEC. 1944.
- (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-4A.

GLIDER CHARACTERISTICS

WEIGHT		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- 83'8"
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- 9'4"
		W- (Tact. gear) 852 SQ. FT.

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TOWPLANE & GLIDER TACTICAL PLANNING PERFORMANCE CHART

PAGE 46
AS OF:
23 FEB 1946

CARGO TOWPLANE AND CG-4A GLIDER

TOWPLANE & GLIDER COMBINATION	LOADING						TAKE OFF (WITH GLIDER ATTACHED) SL-HARD SURFACE-NO WIND			CLIMB (AT MINIMUM TOW SPEED)				RANGE & ENDURANCE MAXIMUM 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 I. A. S.	GROUND RUN DISTANCE (FT.)	I. A. S. FOR CLIMB (M.P.H.)	INITIAL RATE OF CLIMB (FT./MIN.)	SERVICE CEILING (FT.)	TIME TO SERVCE CEL. (MIN.)	RADIUS OF ACTION (GLIDER RELEASED AT RADIUS)			RECOMM CRUISING ALTITUDE (FT.)	MAX RANGE (WITH GLIDER)		
	TAKE-OFF WEIGHT (LB.)	CARGO OR PASS. (LB.)	TAKE-OFF WEIGHT (LB.)	BOMBS CARGO OR PASS. (LB.)	FUEL (U.S. GAL)	RADIUS (MI.)									TIME OUT (HRS.)	TIME BACK (HRS.)	RANGE (MI.)		ENDUR. (HRS.)		
C-46A & (1)CG-4A	7500	3800	41000	NONE	1100	150	3400	85	2650	120	640	12000*	22	770	5.2	4.7	5000	1255	8.5	* LIMITED - NO OXYGEN IN GLIDER	
	7500	3800	46000	5000	1100	150	4450	90	3350	120	490	12000*	30	715	5.3	4.3	5000	1115	8.2		
C-46A & (2)CG-4A	7500	3800	41000	NONE	1100	150	4700	85	3500	120	330	12000*	30	605	4.5	3.7	5000	850	6.3	* LIMITED - NO OXYGEN IN GLIDER. NOTES: THE 46000 LB. LOADING WITH (2) GLIDERS IS FOR EMERGENCY RELEASE ONLY.	
	7500	3800	46000	5000	1100	150	6700	90	4750	120	240	8700	43	555	4.1	3.4	5000	755	5.7		
C-47, 47A & 53 (PADDLE BLADE PROPS) & (1)CG-4A	7500	3800	26000	3000	80L	150	4600	80	3000	105	515	12000*	21	575	4.8	3.6	5000	955	7.9	* LIMITED - NO OXYGEN IN GLIDER.	
	7500	3800	29000	6000	80L	150	5350	85	3200	105	410	11300	37	545	4.6	3.4	5000	870	7.3		
	7500	3800	31000	8000	80L	150	5900	85	3400	105	350	10400	39	520	4.4	3.1	5000	820	6.9		
C-47, 47A & 53 (PADDLE BLADE PROPS) (1) CG-4A (TOWPLANE EQUIPPED WITH PARA-PACK RACKS)	7500	3800	26000	3000	80L	150	4750	80	3100	105	465	11800	35	525	4.4	3.6	5000	870	7.5		
	7500	3800	29000	6000	80L	150	6000	80	3350	105	370	10600	38	485	4.1	3.4	5000	830	6.9		
C-47, 47A & 53 (PADDLE BLADE PROPS) & (2)CG-4A	7500	3800	24200 ^f	1200	80L	150	6250	80	3550	105	220	7600	46	450	4.0	2.8	2000	665	5.8	LOADINGS SHOWN ARE FOR EMERGENCY RELEASE ONLY.	
	7500	3800	26000 ^f	3000	80L	150	6900	80	3800	105	180	7300	50	435	3.8	2.7	2000	630	5.5		
C-60A & (1)CG-4A	7500	3800	18500	NONE	64L	150	4000	85	2750	120	550	12000	37	580	4.3	3.6	5000	960	6.9	* LIMITED - NO OXYGEN IN GLIDER.	
	7500	3800	21500	3000	64L	150	5550	85	3675	120	320	11500	48	410	3.1	2.5	5000	960	4.2		
C-60A & (2)CG-4A	4700 ^f	1000	18500	NONE	64L	150	6200	85	4100	120	250	8000	40	360	2.7	2.2	5000	540	4.5	LOADINGS SHOWN ARE FOR EMERGENCY RELEASE ONLY.	
	7500 ^f	3800	18500	NONE	64L	150	7000	85	4500	120	200	7300	41	330	2.5	2.0	5000	475	3.6		

NOTES:

- (1) REFERENCE MATERIAL FROM TECHNICAL ORDER 01-1-113 dated 20 DEC. 1944.
(2) ALL PERFORMANCE SHOWN WITH GLIDER TRAINING GEAR ATTACHED.

RED FIGURES ARE PRELIMINARY; SUBJECT TO
REVISION AFTER FLIGHT CHECK.TOW PLANE PERFORMANCE WITH CG-4A TO
BE SAME AS WITH CG-4A

GLIDER CHARACTERISTICS

WEIGHT
B-BASIC
C-COMBAT
W-WAR MAX.

SIZE

S-SPAN
L-LENGTH
H-HEIGHT
T-TREAD
W-WING AREAB- (3700 to
14500)
C- 7500
W- 9000

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(15 RES.)

S- 83'8"
L- 148'4"
H- 12'7"
T- 9'4"
W- (Tact. gear)
852 sq. ft.

WP 12-10-42-204

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TOWPLANE & GLIDER TACTICAL PLANNING PERFORMANCE CHART

PAGE 48
AS OF:
23 FEB. 1945

CARGO TOWPLANE AND CG-13A GLIDER

TOWPLANE & GLIDER COMBINATION	LOADING						TAKE OFF (WITH GLIDER ATTACHED) S.L. HARD SURFACE-NO WIND			CLIMB (AT MINIMUM TOW SPEED)				RANGE & ENDURANCE MAXIMUM STATUTE AIR MILES-NO WIND-NO RESERVE						REMARKS
	GLIDERS		TOWPLANE				TO CLEAR 50' OBJ. DISTANCE (FT.)	TAKE OFF SPEED I.A.S.	GROUND RUN DISTANCE (FT.)	I.A.S. FOR CLIMB (M.P.H.)	INITIAL RATE OF CLIMB (FT./MIN.)	SERVICE CEILING (FT.)	TIME TO SERVCE CEIL. (MIN.)	RADIUS OF ACTION (GLIDER RELEASED AT RADIUS)			RECOMM CRUISING ALTITUDE (FT.)	MAX. RANGE (WITH GLIDER)		
	TAKE-OFF WEIGHT (LB.)	CARGO OR PASS. (LB.)	TAKE-OFF WEIGHT (LB.)	BOMBS CARGO OR PASS. (LB.)	FUEL (U.S. GAL.)	MAX TOW SPEED (M.P.H.)								RADIUS (MI.)	TIME OUT (HRS.)	TIME BACK (HRS.)		RANGE (MI.)	ENDUR. (HRS.)	
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	
C-47, 47A & 53 PADDLE BLADE PROPS & (1) CG-13A	10000	1300	24200	1200	804	195	4250	85	3450	105	460	12000*	36	555	4.5	3.6	2000	855	7.4	* LIMITED - NO OXYGEN IN GLIDER. # LOADING OF 17700 LB. IS FOR EMERG- ENCY RELEASE ONLY.
	15700	7000	24200	1200	804	195	5050	90	3550	105	300	9500	41	485	4.2	3.2	2000	725	6.3	
	17700#	9000	24200	1200	804	195	6300	90	3400	105	245	9500	45	460	4.0	3.0	2000	675	5.9	
C-60A & (1) CG-13A	9500	800	18000	NONE	644	-	3900	85	3350	120	420	12000*	39	420	3.1	2.6	5000	590	4.4	* LIMITED - NO OXYGEN IN GLIDER.
C-46A & (1) CG-13A	10000	1300	41000	NONE	1140	195	4400	85	3200	120	455	12000*	29	700	3.2	4.2	5000	1095	8.1	* LIMITED - NO OXYGEN IN GLIDER.
	18900	10200	41000	NONE	1140	195	5150	90	3700	120	320	12000*	45	610	4.6	3.7	5000	895	6.7	

NOTES:

(1) REFERENCE MATERIAL FROM TECHNICAL ORDER 01-1-143 dated 20 DEC. 44


(2) ALL PERFORMANCE SHOWN WITH GLIDER TRAINING GEAR ATTACHED.

ATTENTION: WEIGHT OF GLIDER MAY BE LIMITED BY TOWPLANE PERFORMANCE; SEE T.O. 01-1-143 DEC. 1944, FOR ALLOWABLE GLIDER WEIGHT WITH CORRESPONDING TOWPLANE.

(A) TYPICAL GLIDER CONDITIONS

- (a) JEEPS (2) & TROOPS (8) & CREW (2)
- (b) JEEP (1) & TROOPS (8) & CREW (2) & 75mm. HOWITZER (1) & AMMUNITION (150 RDS.)
- (c) TROOPS (8) & CREW (2) & 75mm. HOWITZER (2) & AMMUNITION (155 RDS.)
- (d) TROOPS (8) & CREW (2) & STD. 105mm. HOWITZER (1) (M-2) & AMMUNITION (63 RDS.)
- (e) TROOPS (10) & CREW (2) & AERIAL DELIVERY CONTAINERS (4)
- (f) WEAPONS CARRIER, 6x6, 1 1/2 TON (1) & CREW (2)
- (g) JEEP (1) & TROOPS (6) & CREW (2) & 105mm. HOWITZER (1) & AMMUNITION (27 RDS.)

GLIDER CHARACTERISTICS

WEIGHT		SIZE
B-BASIC		S- SPAN
C-COMBAT		L- LENGTH
W-WAR MAX.	H- HEIGHT	
	T- TREAD	
	W- WING AREA	
B- 8700	TYPICAL GLIDER CAPACITIES	
C- 18900	SEE NOTE "A" AT LEFT	
W- 18900	S- 85' 7"	
	L- 54' 3"	
	H- 20' 3"	
	T- 9' 11"	
	W- 873 sq. ft.	

WP-12-10-48-200

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TOWPLANE & GLIDER TACTICAL PLANNING PERFORMANCE CHART

PAGE 45
AS OF:
23 FEB. 1945

CARGO TOWPLANE AND CG-15A GLIDER

TOWPLANE & GLIDER COMBINATION	LOADING						TAKE OFF (WITH GLIDER ATTACHED) S.L. - HARD SURFACE - NO WIND			CLIMB (AT MINIMUM TOW SPEED)				RANGE & ENDURANCE MAXIMUM 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 (I.A.S.)	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		20
C-47 47A & 53 PADDLE BLADE PROPS & (1) CG-15A	8000	3950	26000	3000	804	180	1900	80	3150	105	165	* 12000	37	555	4.4	3.8	5000	850	6.8	* LIMITED - NO OXYGEN IN GLIDER.	
	8000	3950	29000	6000	804	180	5600	85	3700	105	365	10500	45	520	4.2	3.5	5000	775	6.2		
	8000	3950	31000	8000	804	180	6200	85	4050	105	320	9500	45	490	3.9	3.3	5000	720	5.7		
C-46A & (1) CG-15A	8000	3950	41000	NONE	1400	180	3850	85	2850	120	620	12000*	25	755	5.3	4.6	5000	1215	8.4	* LIMITED - NO OXYGEN IN GLIDER.	
	8000	3950	45000	5000	1400	180	5050	90	3650	120	480	12000*	30	715	5.3	4.3	5000	1115	8.3		

NOTES:

- (1) REFERENCE MATERIAL FROM TECHNICAL ORDER 01-1-143, DATED 20 DEC. 1944.
- (2) ALL PERFORMANCE SHOWN WITH GLIDER TRAINING GEAR ATTACHED.

GLIDER CHARACTERISTICS

WEIGHT		SIZE
B - BASIC		S - SPAN
C - COMBAT		L - LENGTH
W - WAR MAX.	H - HEIGHT	T - TREAD
	W - WING AREA	
TYPICAL GLIDER CAPACITIES		
B - 14050	(a) TROOP CARRIER: CREW(2) & TROOPS(13).	S - 62'3"
C - 8000	(b) CARGO CARRIER: CREW(2) & TROOPS(4) & JEEP CAR(1).	L - 48'9"
W - 9000	(c) CARGO CARRIER: CREW(2) & TROOPS(3) & 75MM. HOWITZER(1) & 75MM. AMMUNITION(15 RES.)	H - 12'7"
		T - -
		W - 556 SQ. FT.

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