REPORT NO. TSEAL-6-1A

AAF AIR TECHNICAL SERVICE COMMAND

TACTICAL PLANNING

Characteristics & Performance Chart

PUBLISHED MONTHLY BY CHIEF, ENGINEERING DIVISION,
AIR TECHNICAL SERVICE COMMAND, WRIGHT FIELD, OHIO.

Attention

MANY EARLY TACTICAL MODELS HAVE BEEN DELETED THIS ISSUE. RETAIN JUNE COPY.

JULY-1945

BOMBE

CARG

FIGHTE

GLIDE

MISC.

WF-O-7 JUL 45 955

W-904

[redacted] REPORT NO. TSEAL-6-1A

M1092-10

(FORMERLY)
EE-393

AAF AIR TECHNICAL SERVICE COMMAND

TACTICAL PLANNING

Characteristics & Performance Chart

PUBLISHED MONTHLY BY CHIEF, ENGINEERING DIVISION,
AIR TECHNICAL SERVICE COMMAND, WRIGHT FIELD, OHIO.

n
L MODELS
IS ISSUE.

BOMBERS

CARGO

FIGHTERS

GLIDERS

MISC.

1945

[redacted]

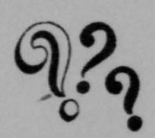
W-904

WHAT'S NEW THIS MONTH?

W.E.P.
SCR-274N
COMMAND SET
H.V.A.R.

In this issue, the transition to the new format has been completed. In the two years during which the old form was in use, many suggestions for changes have been received. The cumulative result is now evident: oil capacities have been added, and maximum landing weights; new notes on weight limitations, rocket installations, war emergency power, and radio types now appear. The page has been arranged and type chosen with a view toward maximum readibility.

The change in format has also presented the opportunity to discontinue airplanes which are no longer operational. This change was noted on last months cover.

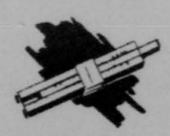


The large number of answers to our questionnaires have finally been digested. Some comments on them appear on the back page of this issue. The results of these questionnaires have been applied to this publication, as evidenced by a number of minor changes which have been made over the last few months, and some of the new items discussed on this page are also in answer to requests returned with the questionnaires.

The Definitions on Page 3 have been clarified in the light of recent developments and in the interest of ease of presentation and interpretation of the data carried in this Chart. Weights, speeds, and time to climb have been redefined or clarified.

Some new types of aircraft are covered in a new Miscellaneous Section. Liaison, light cargo and passenger, and rotary wing aircraft appear in this issue with data on photographic types being prepared for future issues.

Flight test results just released by the Wright Field Flight Section have been drawn upon for data on speed and range losses of fighters with rockets installed.



In the past, it has been the policy to initiate flight tests for the purpose of checking the validity of calculated performance data. In the last six months a phenomenal run of bad luck has attended these tests - bad weather, excessive maintenance, and washed-out airplanes are some of the detrimental factors. At the present time sixteen aircraft are undergoing tests or being prepared for test. Some of these are new and have not yet been released to the service, while others have been in use for some time. Such tests are noted on their pertinent pages.

Something new in charts are the loading diagrams for each of the major cargo-type airplanes. Alternative equipment and personnel loadings are shown, with the weights of individual items and their disposition within the airplanes for best weight and balance control.

W-904

[redacted]

SECURITY CLASSIFICATION EE-393

PAGE 3
AS OF:
29 JUNE 1945

MODEL & BLOCK NO.	ENGINE: ENGINE MFGR.	ENGINE: MODEL	ENGINE: SUPERCHARGER	ENGINE: TAKE-OFF H.P.	ENGINE: WAR EMERG./ALT.	ENGINE: MILITARY /ALT.	ENGINE: CONTINUOUS/ALT.	PROPELLER: PROP. MFGR.	PROPELLER: PROP. DIA.	PROPELLER: NO. OF BLADES	PROPELLER: PROP. TYPE	SIZE: SPAN	SIZE: LENGTH	SIZE: HEIGHT	SIZE: TREAD	SIZE: WING AREA	WEIGHT: BASIC	WEIGHT: COMBAT	WEIGHT: WAR MAX.	COMBAT CREW	FUEL: TANK TYPE OR LOCATION	FUEL: NO. OF TANKS & CAPACITY	GUNS: NO. & LOCATION	GUNS: CAL./RDS./TYPE	GUNS: ROCKET INS.	BOMBS: NO. & SIZE (INTER.)	BOMBS: NO. & SIZE (EXT.)	BOMBS: MAX. LOAD	CARGO: STATION	CARGO: CAPACITY	CARGO: MAX. LOAD	RADIO	REMARKS & REF.	PERFORM: TAKE-OFF & LAND	PERFORM: HIGH SPEED & CLIMB	PERFORM: RANGE & END.	REMARKS ON PERFORMANCE	FOOT NOTES	SILHOUETTES	MODEL & BLOCK NO.
B-17																																								B-17
B-24																																								B-24
B-29																								1	1															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																																								CARGO
P-38																																								P-38
P-390(20-30 INCL)																																								P-390(20-30 INCL)
OTHER P-39's																																								OTHER P-39's
P-40																																								P-40
P-47M & N																																								P-47M & N
OTHER P-47's																																								OTHER P-47's
P-51																																								P-51
P-51H																																								P-51H
P-61																																								P-61
P-63																																								P-63
P-80																																								P-80
CG-4A																																								CG-4A
CG-13																																								CG-13
CG-15																																								CG-15

ALL REMARKS CLASSIFIED AS ITEMS TO WHICH THEY REFER.

NOTE: ALL OTHER GLIDER DATA CONFIDENTIAL

ALL REMARKS CLASSIFIED AS ITEMS TO WHICH THEY REFER.

NOTES

1 ONLY B-29B IS CONFIDENTIAL, OTHER B-29's ARE RESTRICTED.

CONFIDENTIAL

(Page 11).....B-29 SAMPLE MISSION
(Page 12).....B-29 ARM. PAGE
(Page 428).....FIGHTER COMBAT RADIUS ACTION

THE SECURITY CLASSIFICATION SHOWN ABOVE IS SPECIFICALLY FOR THE MATERIAL GIVEN IN THE JULY 1945 ISSUE OF THE TACTICAL PLANNING CHARACTERISTICS AND PERFORMANCE CHART

EACH DOCUMENT SHOULD BE GRADED ACCORDING TO ITS OWN CONTENT AND NOT NECESSARILY ACCORDING TO ITS RELATIONSHIP TO ANOTHER DOCUMENT (PARAGRAPH 8 b, AR 380-5)

Legend

- CONFIDENTIAL
- RESTRICTED
- UNCLASSIFIED

[redacted]

W-904

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 necessarily actual flight test results. For detailed planning see T.O. listed as references.

WARNING

THESE CHARTS CONTAIN CONSERVATIVE AVERAGES FOR TACTICAL PLANNING AND ARE NOT SUITABLE FOR AERODYMANIC 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. All speeds shown are true air speeds. 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.

[redacted]

DEFINITIONS

CHARACTERISTICS

SUPERCHARGER: "TURBO" indicates exhaust driven turbine with single speed integral diffuser.

BHP/ALT: Brake horsepower per engine at critical altitude with ram.

- T: Maximum power for take off.
- M: Military power for combat at altitude shown, (usually limited to 15 min. duration)
- WE: War emergency power for combat at altitude shown, (limited to 5 min. duration only)
- C: Maximum power for continuous operation.
- Note: Maximum cruise power is the maximum power for unlimited operation with lean mixture.

SIZE: Approximate dimensions for storage planning.

- Length: Does not include protruding guns.
- Height: Maximum in three point position.
- Wing area: Standard aerodynamic surface area.
- Tread: Center to center main wheels: (outboard if dual).

WEIGHTS: Approximate averages for planning purposes.

- B: Includes all equipment, that has a fixed location and is actually present in the airplane; air frame; power plant; and accessories; trapped fuel oil; full hydraulic; cooling and anti-icing fluid systems and reservoirs; armor plate, ordnance (less ammunition & bombs); chemical. navigation, oxygen, pyrotechnics, and radio equipment.
- 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.
- 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.
- M: Recommended max. landing as established in Tech. Order 01-1B-44. (10 March 1945).

FUEL & OIL Standard fuel tankage and capacities as well as max. oil.

ARMAMENT: Resume' of information in the "ARMAMENT & BOMB INSTALLATIONS CHART" (EE-306-A).

RADIO Resume' of typical models that may be installed.

PERFORMANCE

BOMBS: Maximum rack capacity for standard sizes.

CARGO: Cargo, passenger or troop capacities.

- Max. load: One size only on each bomb rack (in some cases a reduction in fuel load is required) Practical total cargo based on gross weight.

TAKE OFF & LANDING: (At 3000' runway alt.) Values are at least 125% of optimum.

- Gross weight: Arbitrary values for reference only.
- (To clear 50') Distances representative of minimum airport requirements.
- Ground run: Distances representative of minimum runway requirements.
- Landing speed: Practical minimum for average pilot.

HIGH SPEED & CLIMB: Values are for clean new airplanes.

- Military power: For limited periods of combat operation.
- War emergency power: (Performance with War Emergency ratings are shown when applicable).
- Time to climb: Time to climb from sea level based on maximum continuous power unless otherwise noted.

RANGE & ENDURANCE: See discussion in "FOREWORD", page 2

- Take off weight: Brief list of typical gross weights.
- Bombs, etc: Typical loadings combined with various tank capacities. No consideration is given to loadings requiring partially filled tanks.
- Note: Take off weights with corresponding load and fuel quantity applies to all values to the right on the same line.
- Max. cont. power: High speed cruising with rich mixture. (For emergency cruising only)
- Max. cruise power: Maximum continuous operation with lean mixture setting.
- Long range: Practical maximum range for planning purposes under all conditions set forth.

RED PRINT: Preliminary estimates or calculated data.

[redacted]

W-904

BOEING (SEATTLE) "BO"

MODEL & BLOCK NO.	ARMAMENT: NO. GUNS & CALIBER	ARMAMENT: RDS. PER GUN	ARMAMENT: LOCATION & TYPE	BOMBS: INTERNAL NO. & SIZE	BOMBS: EXTERNAL NO. & SIZE	BOMBS: MAX. LOAD LB.	FUEL: U.S. GAL. (MAXIMUM)
B-17F-BO (-1 thru -27)	1-.30 2-.50 2-.50 2-.50 2-.50	500 a 300 400 500 565	NOSE····FLEX. SIDE WAIST·FL. UPPER TURRET LOW.BALL TRR. TAIL···FLEX.MT.	2-2000 6-1600 6-1000 12- 500 16- 250 24- 100	NONE	9600	2550
B-17F-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	2-4000 2-2000 2-1600 2-1000	6-1600 2-4000x 17600	AS ABOVE
B-17F-BO (-55 thru 1st.30(-85))	2) 1) 2) .50 2) 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) 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) 2) 1) 2) .50 2) 2) 2)	Tot 610 365 300 c 600 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) AND SUBSEQUENT.
c RADIO COMP.GUN DELETED LAST68(-105&-110). x EXTERNAL

WF-9-11-43-200

DOUGLAS (LONG BEACH) "DL"

MODEL & BLOCK NO.	ARMAMENT: NO. GUNS & CALIBER	ARMAMENT: RDS. PER GUN	ARMAMENT: LOCATION & TYPE	BOMBS: INTERNAL NO. & SIZE	BOMBS: EXTERNAL NO. & SIZE	BOMBS: MAX. LOAD LB.	FUEL: U.S. GAL. (MAXIMUM)
B-17F-DL -1 thru 1st.13(-10)	1-.30 2-.50 2-.50 2-.50 2-.50	500 a 300 400 500 565	NOSE····FLEX. SIDE WAIST FL. UPPER TURRET LOW.BALL TRR. TAIL··FLEX.MT.	2-2000 b 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) 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) 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		AS ABOVE
B-17G-DL (-1 thru -85)	2) 2) 1) 2) .50 2) 2) 2)	Tot 510 365 300 c 600 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 MOUNTING 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

VEGA (BURBANK) "VE"

MODEL & BLOCK NO.	ARMAMENT: NO. GUNS & CALIBER	ARMAMENT: RDS. PER GUN	ARMAMENT: LOCATION & TYPE	BOMBS: INTERNAL NO. & SIZE	BOMBS: EXTERNAL NO. & SIZE	BOMBS: MAX. LOAD LB.	FUEL: U.S. GAL. (MAXIMUM)
B-17F-VE (-1 thru -10)	1-.30 CAL.(300 RDS.) NOSE GUN IN 1st. 12 AIRPLANES. NOSE GUN DELETED ON NEXT 25 THRU (-10). NO RADIO COMPARTMENT GUN UNTIL LAST 14(-15). OTHER ARMAMENT AS ABOVE			2-2000 a 6-1600 6-1000 12- 500 16- 250 24- 100	NONE	9600	2550
B-17F-VE (-15 & -20)	2) 1) 2) .50 2) 2) 2)	300 300 300 400 500 565	NOSE···FLEX. RADIO COMPART. SIDE WAIST·FL. UPPER TURRET LOW.BALL TRR. TAIL·FLEX.MT.	AS ABOVE	EXTERNAL RACKS ON Last 31 (-20)&SUB.	AS ABOVE	AS ABOVE
B-17F-VE (-25 & -30)	A S	A B O V E		AS ABOVE	b 2-4000 2-2000 2-1600 2-1000	6-1600 2-4000x 17600	2550 (B-17F-25) 3630 (B-17F-30)
B-17F-VE (-35 thru -50)	3) 1) 2) .50 2) 2) 2)	300 300 300 400 500 565	NOSE····FLEX. RADIO COMPART. SIDE WAIST·FL. UPPER TURRET LOW.BALL TRR. TAIL··FLEX.MT.	AS ABOVE EXCEPT ONLY MOUNTING LUGS & CONTROLS RETAINED FOR EXTERNAL BOMB RACKS ON (-35) & SUBSEQUENT MODELS.			3630
B-17G-VE (-1 thru -110)	2) 2) 1) 2) .50 2) 2) 2)	Tot 610 365 300 e 600 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 14(-30); LUGS & CONTROLS RETAINED. e RADIO GUN STOWED(-35)thru 1st.16(-85); RADIO GUN DELETED LAST 84(-85) & SUBSQT.
c CHEYENNE TAIL MT.GUN LAST114(-85)& SUBSQT. x EXTERNAL

WF-9-11-43-200

GENERAL NOTE:
THE 8x1600 LB.ARMOR PIERCING BOMBS MAY BE CARRIED,BUT BOMB RAIL LOAD FACTORS AND CLEARANCES ARE REDUCED AND MANEUVERING OF AIRPLANE MUST BE LIMITED ACCORDINGLY.

TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART

PAGE 7 AS OF 29 JUNE 1945

MODEL & BLOCK NO.	ENGINE & PROP. NUMBER	ENGINE MFGR. MODEL SUPERCHARGER PROP. MFGR. TYPE	B.H.P./ALT. T-TAKE OFF W-WAR EMERG. M-MILITARY C-CONTINUOUS	SIZE S-SPAN L-LENGTH H-HEIGHT T-TREAD W-WING AREA	WEIGHT B-BASIC C-COMBAT W-WAR MAX. M-MAX LAND.	* NOTES	COMBAT CREW	FUEL & OIL: FUEL TANKAGE TYPE OR LOCATION ALSO (MAX. OIL)	FUEL TANKAGE NO. AND CAPACITY ALSO (MAX. FUEL)	ARMAMENT: NO. GUNS AND SIZE	RDS. PER GUN	LOCATION AND TYPE	BOMBS: NO. AND SIZE INTERNAL	BOMBS: NO. AND SIZE EXTERNAL	MAX. LOAD	RADIO: TYPICAL MODELS CARRIED	REMARKS & REFERENCE
B-17F (LATEST MODEL)	4	WRIGHT R-1820-97 TURBO HAMILTON STD. 11'7" DIA. - 3 BL. F.F., HYDROMATIC	T 1200/ S.L W 1380/25000 a M 1200/27000 C 1000/30000	S 103'9" L 74'9" H 19'1" T 21'2" W 1420 Sq. ft.	B 38000 C 55000 W 72000* M 50000		10	MAIN - WINGS WING TIPS BOMB BAY (148)	5- 1730 2 x 540 2 x 410 (3620)	3) .s 2) .s 1) 2) - 50 2) 2)	300 300 300 400 500 565	NOSE - FLEX. SIDE WAIST-FLEX. RADIO COMPART.- UPPER TURRET LOW. BALL TURRET TAIL-FLEX. MOUNT	2-2000 6-1000 6-1010 12- 500 16- 250 24- 100	2-4000 2-2000 2-1600 2-1000 (SOME MODELS)	5-1600 2-4000 17600	SEE NOTE (A)	REFER TO PAGE 4 FOR "FOREWORD." REFER TO PAGE 3 FOR SECURITY CLASSIFICATION. REFER TO PAGE 5 FOR DEFINITIONS. REFER TO T.O. LISTED FOR DETAILED PLANNING. B-17F TECH. ORDER 01-20EF-1 (REV. 10 FEBRUARY 1945) B-17G TECH. ORDER 01-20EG-1 (REV. 25 FEBRUARY 1945) (a) WAR EMERGENCY POWER PERMITTED ONLY WHEN CARBURETORS MODIFIED TO PARTS LIST NO. 395563-3. (b) EARLIER B-17G's HAD CRITICAL ALTITUDE SHOWN FOR B-17F MODELS. (c) EARLY MODELS HAVE 74'9" LENGTH. (d) SEE PAGE OPPOSITE FOR DETAILED ARMAMENT BREAKDOWN.
B-17G (LATEST MODEL)	4	AS ABOVE	T 1200/ S.L W 1380/26700 a M 1200/32700 b C 1000/35200 b	S 103'9" L 74'4" c H 19'1" T 21'2" W 1420 Sq. ft.	AS ABOVE		10	AS ABOVE EXCEPT PROVISIONS ONLY, FOR THE BOMB BAY FUEL TANKS.		2) .d 2) 2) 2) - 50 2) 2)	510 Tot. 365 600 400 500 565	CHEEK - FLEX. CHIN TURRET SIDE WAIST-FLEX. UPPER TURRET LOW. BALL TURRET CHEYENNE TAIL MT.	AS ABOVE	MOUNTING LUGS & CONTROLS RETAINED FOR EXTERNAL RACKS.	9600	AS ABOVE	
			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												
			T W M C	S L H T W	B C W M												
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): GROSS WEIGHT LB	TO CLEAR 50': T.O. DIST. FT	LAND DIST. FT	LANDING SPEED M.P.H.	GROUND RUN: T.O. DIST. FT	LAND DIST. FT	HIGH SPEED & CLIMB (CLEAN AIRPLANE AT NORMAL COMBAT WEIGHT): WEIGHT LB	STD. ALT. FT	WAR EMERG.: HIGH SPEED M.P.H.	RATE OF CLIMB FT/MIN	MIL. POWER: HIGH SPEED M.P.H.	RATE OF CLIMB FT/MIN	MAX. CONTIN. POWER: HIGH SPEED M.P.H.	RATE OF CLIMB FT/MIN	TIME TO CLIMB MIN.	RANGE AND ENDURANCE (STATUTE AIR MILES - NO WIND - NO ALLOWANCE FOR RESERVE): LOADING: TAKE OFF WEIGHT LB	BOMBS CARGO PASS. LB	TOTAL FUEL U.S. GAL	MAX. CONTINUOUS POWER at 10,000 FT.: RANGE MILES	ENDUR. HOURS	at 25,000 FT.: RANGE MILES	ENDUR. HOURS	MAX. CRUISE POWER at 10,000 FT.: RANGE MILES	ENDUR. HOURS	at 25,000 FT.: RANGE MILES	ENDUR. HOURS	LONG RANGE at 10,000 FT.: RANGE MILES	ENDUR. HOURS	REMARKS
B-17F	40000	-	3000	90	-	1200	55000	30000	313	550	298	400	280	225	32.0	65500	NONE	3630	-	-	-	-	-	-	-	-	3500 g	21.2 g	(e) FIRST 3 HOURS OF FLIGHT AT 20000 FT. ALTITUDE. (f) FIRST 4 HOURS OF FLIGHT AT 20000 FT. ALTITUDE. (g) MAX. FERRY RANGE MAY BE RESTRICTED BY INSUFFICIENT OIL IF ENGINE IS NOT IN BETTER THAN AVERAGE CONDITION: OIL CONSUMPTION VARIES FROM 3 QT. TO 3 GAL. PER HR. PER ENGINE DEPENDING ON TIME SINCE OVERHAUL. B-17G FLIGHT TEST REQUESTED
	45000	-	3500	95	-	1500		25000	314	1025	299	725	274	450	38.2	59500	NONE	2810	1400	6.1	1550	6.2	2050	10.1	2150	9.9	2800	17.4	
	50000	3200	4000	100	2300	1900		20000	303	1150	288	850	266	550	25.7	63500	4000	2810	1400	6.1	1550	6.2	2050	10.1	2100	9.9	2700	17.4	
	55000	4000	4500	104	3100	2400		15000	288	1250	274	950	255	675	17.3	65500	6000	2810	1400	6.0	1500	6.0	2000	10.0	-	-	2600	17.2	
	60000	4800	-	-	3700	-		10000	276	1350	253	1050	245	750	10.2														
	65000	6300	-	-	4900	-		5000	265	1425	252	1125	236	825	4.0														
B-17G		A S	A B	O V E			55000	30000	310	800	295	350	-	-	-	65500	NONE	3630	-	-	-	-	-	-	-	-	3100 g	17.1 g	
								25000	302	900	287	600	258	210	54.0	59500	NONE	2810	1400	6.3	1500	6.2	2000	10.0	2350	8.6	2550	14.4	
								20000	291	1050	277	750	255	385	37.0	63500	4000	2810	1400	6.3	1450 e	6.2 e	1950	10.0	1850 f	8.7 f	2350	13.0	
								15000	280	1200	267	900	245	500	26.0	65500	6000	2810	1400	6.3	ABOVE PRAC. CEIL.		1800	9.6	ABOVE PRAC. CEIL.		2250	12.5	
								10000	269	1300	258	1000	234	580	16.0														
								5000	258	1400	246	1100	223	620	7.0														
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)

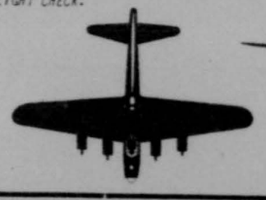
EARLIER B-17's	NAME	LATER B-17's
SCR-269	LIAISON	AN-ARC-8
SCR-211	FREQUENCY METER	AN-SPM-
SCR-522	COMMAND SET	AN-ARC-3
SCR-274N	COMPASS	SCR-269G AN-ARN-7
SCR-269G	COMPASS	AN-ARN-7
SCR-695	IFF	SCR-695
SCR-695	IFF	SCR-695
SCR-578	EMERGENCY TRANSMITTER	SCR-578A
BC-38	INTERPHONE	AN-AIC-10
BC-433	MARKER BEACON	BC-453
BC-32	VISTER EQUIPMENT	BC-348
BC-159	GLIDE PATH	AN-ARN-5
BC-453	LOCALIZER	BC-453
-	STATIC DISCHARGE	AN-ASA-1
-	ICE PROTECTORS	PROVISIONED

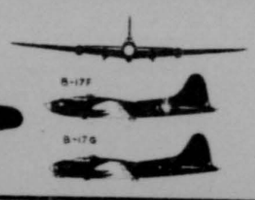
* MOST COMMON INSTALLATION OF LATER B-17G AIRPLANES

POSSIBLE THEATER INSTALLATIONS

GEE	AN-ARA-24
LOW ALT. ALTIMETER	AN-APN-
H-2X ALT. BOMB-AID	AN-APQ-13 AN-APQ-7
SYNCHRON-ISM	AN-ARW-8
BOMB RELEASE	AN-ARW-16
H-2X ALT. ALTIMETER	SCR-718

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





MANUFACTURED BY BOEING - DOUGLAS - VEGA

B-17

"FORTRESS"

W-904

CONSOLIDATED (SAN DIEGO) "CO"

MODEL & BLOCK NO.	ARMAMENT: NO GUNS & CALIBER	ARMAMENT: RDS. PER GUN	ARMAMENT: LOCATION & TYPE	BOMBS: INTERNAL NO & SIZE	BOMBS: EXTERNAL NO & SIZE	BOMBS: MAX. LOAD LB.	FUEL: U.S. GAL. (MAXIMUM)
B-24D-CO D thru last 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 1) 2)	200 400 100 600	NOSE·····FLEX. UPPER TURRET TUNNEL···FLEX. TAIL TURRET	AS	ABOVE		2364 Last 36(-15) 3614 -20 & sub.
B-24D-CO -25 thru last 25(-140)	3) 2) 2) .50 1) 2)	100 250 400 100 600	NOSE·····FLEX. SIDE WAIST··FL. UPPER TURRET TUNNEL···FLEX. TAIL TURRET	4-2000 8-1600 8-1000 12- 500 12- 250 20- 100	NONE	12800	3614
B-24D-CO Last 9(-140) thru -170	3) 2) 2) .50 2) 2)	100 250 400 508 600	NOSE·····FLEX. SIDE WAIST··FL. UPPER TURRET LOW. BALL TRR. TAIL TURRET	AS	ABOVE		AS ABOVE
B-24J-CO (-1 thru -210) B-24L-CO (-1 thru -20) B-24M-CO (-1 thru -50)	2) 2) 2) .50 2) 2)	600 250[b] 400 508 600	NOSE TURRET SIDE WAIST-FL. UPPER TURRET LOW. BALL TRR. See "a"	AS	ABOVE		AS ABOVE

NOTES:
a NOT ON B-24D-25
b E-6 MOUNT & INCREASE TO 500 RDS/GUN ON -210.
c B-24J's HAVE TAIL TURRET; B-24L's HAVE HAND HELD GUNS IN TAIL & B-24M's HAVE LIGHT WEIGHT TAIL TURRET.

WP-8-11-45-200

CONSOLIDATED (FT. WORTH) "CF"

MODEL & BLOCK NO.	ARMAMENT: NO GUNS & CALIBER	ARMAMENT: RDS. PER GUN	ARMAMENT: LOCATION & TYPE	BOMBS: INTERNAL NO & SIZE	BOMBS: EXTERNAL NO & SIZE	BOMBS: MAX. LOAD LB.	FUEL: U.S. GAL. (MAXIMUM)
B-24D-CF (-1 & -5)	3) 2) 2) .50 1) 2)	100 250 400 100 600	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)	AS		ABOVE	4-2000 8-1600 8-1000 12- 500 12- 250 20- 100	NONE	12800	AS ABOVE
B-24J-CF (-1 thru -105) B-24E-CF (-1 thru -15)	2) 2) 2) .50 2) 2)	500 250 400 508 600	NOSE TURRET SIDE WAIST-FL. UPPER TURRET LOW. BALL TRR. TAIL TURRET	AS	ABOVE (SEE a)		AS ABOVE
B-24E-CF (-20 thru -30)	2) 2) 2) .50 2) 2)	600 500[b] 400 508 600	NOSE TURRET S.WAIST-E6 MT. UPPER TURRET LOW. BALL TRR. TAIL TURRET	AS	ABOVE		AS ABOVE
B-24J-CF (-401)	A	S	A	B	O	V	E

B-24E-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.

NOTES:
a B-10 SHACKLES FOR 8-1600 LB. BOMBS START ON 2101st. FORD KNOCK-DOWN SET.
b B-24E-20 HAS PROVISIONS FOR ONLY 250 RDS. PER GUN AT SIDE WAIST POSITION.

WP-8-11-45-200

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

MODEL & BLOCK NO.	ARMAMENT: NO GUNS & CALIBER	ARMAMENT: RDS. PER GUN	ARMAMENT: LOCATION & TYPE	BOMBS: INTERNAL NO & SIZE	BOMBS: EXTERNAL NO & SIZE	BOMBS: MAX. LOAD LB.	FUEL: U.S. GAL. (MAXIMUM)
B-24E-DT & FO (-1 thru -15)	2) 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) 2) .50 2) 2)	600 500[b] 400 508 600	NOSE TURRET S.WAIST-E6 MT. UPPER TURRET LOW. BALL TRR. TAIL TURRET	AS	ABOVE		
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. ARMAMENT - BOMBS - FUEL SAME AS LISTED ABOVE.						
B-24L-FO (-1 thru -20) B-24M-FO (-1 thru -15)	2) 2) 2) .50 2) 2)	600 500 400 508 600	NOSE TURRET S.WAIST-E6 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-10 SHACKLES FOR 8-1600 A.P. BOMBS START ON 2101st. FORD KNOCK-DOWN SET.
b B-24E-20's HAVE PROVISIONS FOR ONLY 250 ROUNDS PER GUN.

NORTH AMERICAN (DALLAS) "NT"

MODEL & BLOCK NO.	ARMAMENT: NO GUNS & CALIBER	ARMAMENT: RDS. PER GUN	ARMAMENT: LOCATION & TYPE	BOMBS: INTERNAL NO & SIZE	BOMBS: EXTERNAL NO & SIZE	BOMBS: MAX. LOAD LB.	FUEL: U.S. GAL. (MAXIMUM)
B-24G-NT	3) 2) 2) .50 2) 2)	250 TOT. 250 400 508 a 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-24G-NT (-1 thru -5)	2) 2) 2) .50 2) 2)	600 250 400 508 600	NOSE TURRET SIDE WAIST·FL. UPPER TURRET LOW. BALL TRR. TAIL TURRET	AS	ABOVE		AS ABOVE
B-24G-NT (-10 thru -15)	AS		ABOVE	4-2000 8-1600 8-1000 12- 500 12- 250 20- 100	NONE	12800	AS ABOVE
B-24J-NT (-1 & -5)	A	S	A	B	O	V	E

B-24G-20-NT AIRPLANES ARE DESIGNATED B-24J-1, ETC. WHEN C-1 AUTOMATIC PILOT & M-9 BOMB SIGHT REPLACE A-5 AUTOMATIC PILOT & S-1 BOMB SIGHT.

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

TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART

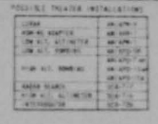
PAGE 9 — AS OF 29 JUNE 1945

MODEL & BLOCK NO.	ENGINE & PROP. NUMBER	ENGINE MFGR. MODEL SUPERCHARGER PROP. MFGR. TYPE	B.H.P./ALT. T-TAKE OFF W-WAR EMERG. M-MILITARY C-CONTINUOUS	SIZE S-SPAN L-LENGTH H-HEIGHT T-TREAD W-WING AREA	WEIGHT B-BASIC C-COMBAT W-WAR MAX. M-MAX. LAND.	NOTES *	COMBAT CREW	FUEL & OIL — FUEL TANKAGE: TYPE OR LOCATION ALSO (MAX. OIL)	FUEL & OIL — FUEL TANKAGE: NO. AND CAPACITY ALSO (MAX. FUEL)	ARMAMENT (NO. ROCKETS-SIZE-INSTALLATION): NO. GUNS AND SIZE	ARMAMENT: RDS. PER GUN	ARMAMENT: LOCATION AND TYPE	BOMBS NO. AND SIZE: INTERNAL	BOMBS NO. AND SIZE: EXTERNAL	BOMBS MAX. LOAD	RADIO TYPICAL MODELS CARRIED	REMARKS & REFERENCE
B-24D (LATEST MODEL)	4	PRATT-WHITNEY R-1830-43 OR -65 TURBO HAMILTON STD. 11'7" DIA. -3 BL. F.F., HYDROMATIC	T 1200/ S L W NONE M 1200/ 26500 C 1100/ 27000	S 110'0" L 66'4" H 18'0" T 25'8" W 1048 Sq. '	B 37000 C 56000 W 71200 * M 56000		10	MAIN - WINGS WING TIPS BOMB BAY (132)	12-2364 2 x 255 2 x 400 (3514)	3) 2) 2) .50 2) 2)	100 250 400 508 600	NOSE - FLEX. SIDE WAIST - FL. UPPER TURRET LOW. BALL TURRET TAIL TURRET	4-2000 8-1600 8-1000 12-500 12-250 20-100	ONLY MOUNTING LUGS & CONTROLS INSTALLED	12800	SEE NOTE (A)	B-24D TECHNICAL ORDER 01-5EC-1 (REV. 25 DEC. 1944) B-24G,H,J,L & M TECH. ORDER 01-5EE-1 (REV. 30 JAN. 1945) (a) EARLY B-24G, H & J's HAD CRITICAL ALTITUDE AS LISTED FOR B-24D. (b) ARMAMENT SHOWN FOR LATEST B-24J-FO. SEE PAGE OPPOSITE FOR DETAILED BREAKDOWN.
B-24G, H & J (LATEST MODEL)	4	AS ABOVE	T 1200/ S L W NONE M 1200/31800[a] C 1100/31500[a]	S 110'0" L 67'2" H 18'0" T 25'8" W 1048 Sq. '	B 38000 C 56000 W 71200 * M 56000		10	A S A B O V E		2) 2) 2) .50 2) 2)	700 [b] 500 400 550 600	NOSE TURRET SIDE WAIST - FL. UPPER TURRET LOW. BALL TURRET TAIL TURRET	A S	A B O V E		AS ABOVE	
B-24L & M (LATEST MODEL)	4	PRATT-WHITNEY R-1830-65 TURBO HAMILTON STD. 11'7" DIA. -3 BL. F.F., HYDROMATIC	T W M C	AS ABOVE	B 37500 C 56000 W 71200 * M 56000	ABSOLUTELY ESSENTIAL THAT WING FUEL TANKS BE FILLED FIRST WHEN TAKING OFF & THAT PROPELLERS BE KEPT IN A HIGH R.P.M.	10	A S A B O V E		AS ABOVE EXCEPT: B-24L HAS HAND HELD FLEX. TAIL GUNS. B-24M HAS LIGHT WEIGHT TAIL TURRET.			A S	A B O V E		AS ABOVE	
			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												
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): GROSS WEIGHT LB	TO CLEAR 50' T.O. DIST. FT	TO CLEAR 50' LAND DIST. FT	LANDING SPEED MPH	GROUND RUN T.O. DIST. FT	GROUND RUN LAND DIST. FT	HIGH SPEED & CLIMB (CLEAN AIRPLANE AT NORMAL COMBAT WEIGHT): WEIGHT LB	STD. ALT. FT	WAR EMERG. HIGH SPEED MPH	WAR EMERG. RATE OF CLIMB FT/MIN	MIL. POWER HIGH SPEED MPH	MIL. POWER RATE OF CLIMB FT/MIN	MAX. CONTIN. POWER HIGH SPEED MPH	MAX. CONTIN. POWER RATE OF CLIMB FT/MIN	MAX. CONTIN. POWER TIME TO CLIMB MIN.
B-24D	40000	-	3300	90	-	2800	56000	30000			-	550	-	350	41.5
	45000	-	3800	95	-	3000		25000			303	900	297	700	30.2
	50000	3900	3900	100	2700	3300		20000			290	1000	284	800	22.0
	55000	4800	4300	105	3400	3500		15000	NONE		277	1150	272	950	15.4
	60000	6400	-		4600	-		10000			263	1200	258	1000	9.7
	65000	8100	-		6500	-		5000			252	1200	246	1050	4.2
B-24G, H & J	AS ABOVE						56090	30000			300	375	290	200	46.0
								25000			290	625	278	450	33.6
								20000	NONE		277	775	267	600	25.0
								15000			264	900	256	725	17.6
								10000			254	975	245	800	11.4
								5000			244	1025	235	850	5.3
B-24L & M	AS ABOVE						AS ABOVE								
COLUMN 19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34

MODEL & BLOCK NO.	RANGE AND ENDURANCE (STATUTE AIR MILES - NO WIND - NO ALLOWANCE FOR RESERVE): LOADING TAKE OFF WEIGHT LB	LOADING BOMBS CARGO MASS LB	LOADING TOTAL FUEL U.S. GAL	MAX. CONTINUOUS POWER at 10000 FT. RANGE MILES	MAX. CONTINUOUS POWER at 10000 FT. ENDUR. HOURS	MAX. CONTINUOUS POWER at 25000 FT. RANGE MILES	MAX. CONTINUOUS POWER at 25000 FT. ENDUR. HOURS	MAX. CRUISE POWER at 10,000 FT. RANGE MILES	MAX. CRUISE POWER at 10,000 FT. ENDUR. HOURS	MAX. CRUISE POWER at 25,000 FT. RANGE MILES	MAX. CRUISE POWER at 25,000 FT. ENDUR. HOURS	LONG RANGE at 10,000 FT. RANGE MILES	LONG RANGE at 10,000 FT. ENDUR. HOURS	REMARKS
B-24D	64000	NONE	3614	-	-	-	-	-	-	-	-	3500 [c]	20.0 [c]	(c) MAX. FERRY RANGE MAY BE RESTRICTED BY INSUFFICIENT OIL IF ENGINE IS NOT IN BETTER THAN AVERAGE CONDITION: OIL CONSUMPTION VARIES FROM 3 QT. TO 3 GAL. PER HR. PER ENGINE DEPENDING ON TIME SINCE OVERHAUL.
	61000	NONE	3164	1200	4.8	1350	4.8	2400	10.9	2500	10.4	3200	16.0	
	61500	3000	2814	1050	4.1	1200	4.1	2050	9.5	2200	9.2	2750	15.4	
	60500	5000	2364	850	3.6	950	3.5	1750	8.0	1800	7.5	2300	13.0	
B-24G, H & J	65000	NONE	3614	-	-	-	-	-	-	-	-	3300 [c]	18.2 [c]	
	62000	NONE	3164	1150	4.8	1350	4.8	2200	10.7	2300	10.2	2900	16.4	
	62500	3000	2814	1000	4.1	1200	4.1	1900	9.5	1950	8.8	2500	14.0	
	61500	5000	2364	850	3.5	950	3.5	1600	7.3	1700	7.3	2100	11.7	
B-24L & M	64500	NONE	3614											
	61500	NONE	3164											
	62000	3000	2814	A S				A B O V E						
	61000	5000	2364											
COLUMN 19	35	36	37	38	39	40	41	42	43	44	45	46	47	48

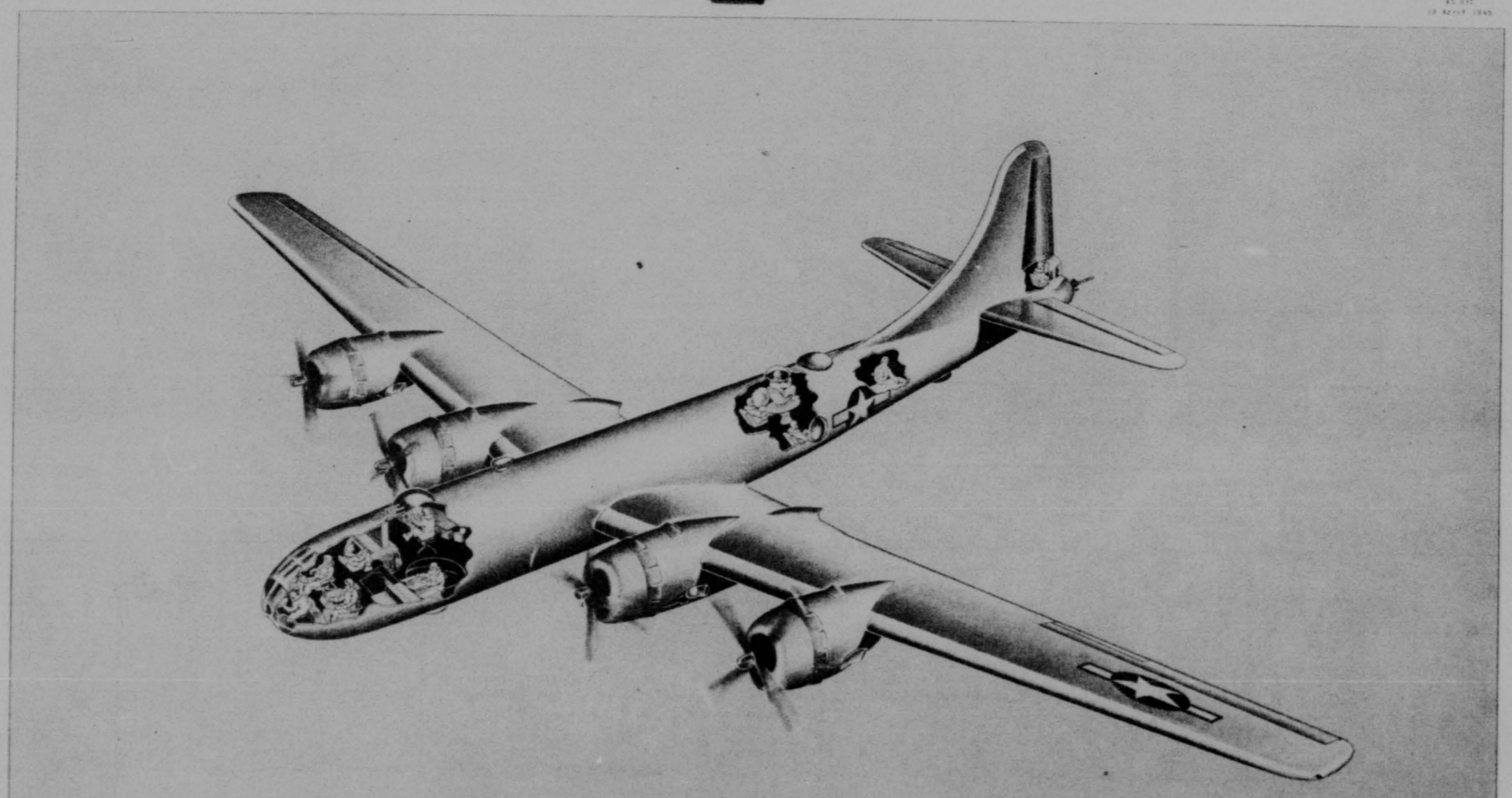
NOTES: (A)



RED FIGURES ARE PRELIMINARY: SUBJECT TO REVISION AFTER FLIGHT CHECK

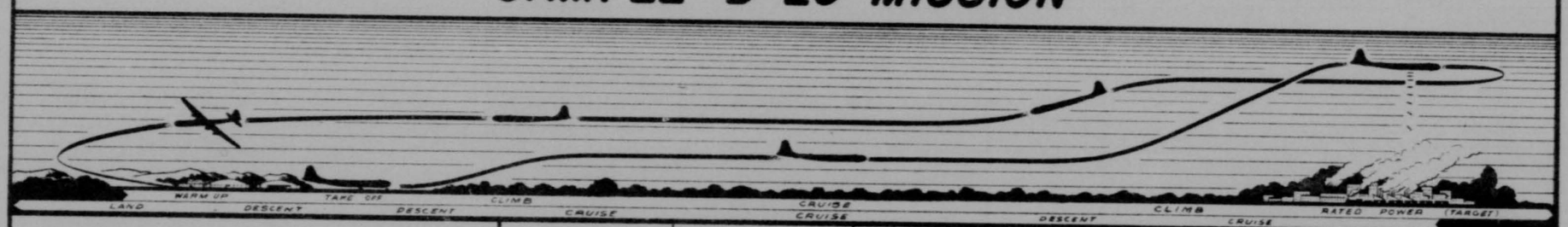
MANUFACTURED BY CONSOLIDATED - DOUGLAS - FORD - NORTH AMERICAN

B-24 "LIBERATOR"



"SUPER FORTRESS"

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	3328
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.

b. 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—8923 GAL.
BOMBS—12000 LB.
RADIUS OF ACTION 1700 MI
(WITH 523 GAL. RESERVE)

BELL (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)	100 1000* 1000* 1000* 1000*	TAIL, M2, TYPE B UPPER FORE TRR. UPPER REAR TRR. LOWER FORE TRR. LOWER REAR TRR.	OUTBD. WINGS INBD. WINGS BOMB BAY	4-2726 6-2912 4x 640	8198
B-29-BA -5 thru 1st.9 (-15)	A S	A B	O V E	OUTBD. WINGS INBD. WINGS CENTER WGS. BOMB BAY	4-2726 6-2912 4-1350 4x 640	9548
B-29-BA 1st.11(-15) thru (-20)	1-20MM. 4) 2) .50 2) 2) 2)	100 675* 1000* 1000* 1000* 1000*	TAIL, M2, TYPE B UPPER FORE TRR. UPPER REAR TRR. LOWER FORE TRR. LOWER REAR TRR. TAIL POWER MT.	A S	A B	O V E
B-29-BA -25 thru -40	4) 2) 2) .50 2) 2)	675* 1000* 1000* 1000* 1000*	UPPER FORE TRR. UPPER REAR TRR. LOWER FORE TRR. LOWER REAR TRR. 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 (RENTON) "BN"

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-BN -1	1-20MM. 2) 2) 2) 2) 2)	100 1000* 1000* 1000* 1000* 1000*	TAIL, M2, TYPE B UPPER FORE TRR. UPPER REAR TRR. LOWER FORE TRR. LOWER REAR TRR. TAIL POWER MT.	OUTBD. WINGS INBD. WINGS BOMB BAY	4-2726 6-2912 4x 640	8198
B-29A-BN -5 thru 1st.11 (-10)	A S	A B	O V E	OUTBD. WINGS INBD. WINGS CENTER WINGS BOMB BAY	4-2726 6-2912 3-1100 4x 640	7378
B-29A-BN Last9 (-10) thru (-15)	2) 2) 2) .50 2) 2)	1000* 1000* 1000* 1000* 1000*	UPPER FORE TRR. UPPER REAR TRR. LOWER FORE TRR. LOWER REAR TRR. TAIL POWER MT.	A S	A B	O V E
B-29A-BN -20 & -30	4) 2) 2) .50 2) 2)	675* 1000* 1000* 1000* 1000*	UPPER FORE TRR. UPPER REAR TRR. LOWER FORE TRR. LOWER REAR TRR. 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)	100 1000* 1000* 1000* 1000*	TAIL, M2, TYPE B UPPER FORE TRR. UPPER REAR TRR. LOWER FORE TRR. LOWER REAR TRR. TAIL POWER MT.	OUTBD. WINGS INBD. WINGS BOMB BAY	4-2726 6-2912 4x 640	8198
B-29-BW -25 thru 1st.25 (-40)	A S	A B	O V E	OUTBD. WINGS INBD. WINGS CENTER WGS. BOMB BAY	4-2726 6-2912 4-1350 4x 640	9548
B-29-BW LAST 75(-40) thru 1st.80(-50)	1-20MM 4) 2) .50 2) 2) 2)	100 675* 1000* 1000* 1000* 1000*	TAIL, M2, TYPE B UPPER FORE TRR. UPPER REAR TRR. LOWER FORE TRR. LOWER REAR TRR. TAIL POWER MT.	A S	A B	O V E
B-29-BW Last20(-50) thru (-65)	4) 2) 2) .50 2) 2)	675* 1000* 1000* 1000* 1000*	UPPER FORE TRR. UPPER REAR TRR. LOWER FORE TRR. LOWER REAR TRR. 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 (OMAHA) "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)	100 675* 1000* 1000* 1000* 1000*	TAIL, M2, TYPE B UPPER FORE TRR. UPPER REAR TRR. LOWER FORE TRR. LOWER REAR TRR. TAIL POWER MT.	OUTBD. WINGS INBD. WINGS CENTER WINGS BOMB BAY	4-2726 6-2912 4-1350 4x 640	9548
B-29-MO Last 19(-20) thru (-35)	4) 2) 2) .50 2) 2)	675* 1000* 1000* 1000* 1000*	UPPER FORE TRR. UPPER REAR TRR. LOWER FORE TRR. LOWER REAR TRR. 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.

TRAPPED UNAVAILABLE FUEL.—When doing extreme maneuvers or making a steep landing approach with low fuel quantities, residual fuel is trapped in the tanks, and can cause one or more engines to cut out because of lack of fuel.

(1) With the airplane fuselage centerline in a 20° nose down position, 268 gallons of fuel are trapped and made unavailable to each inboard engine, and 105 gallons are unavailable to each outboard engine. At a 15° angle, 190 gallons are unavailable to each inboard engine, and 70 gallons are unavailable to each outboard engine.

(2) Eleven gallons of fuel are trapped in each tank, with the airplane at rest on the ground, and cannot be picked up by the booster pumps.

(3) The residual fuel quantities in the tanks for various flight attitudes is shown in the following tabulations.

RESIDUAL FUEL IN WING TANKS WHEN FLYING WITH WINGS LEVEL

FLIGHT ATTITUDE	TANKS 1 AND 4	TANKS 2 AND 3
Body CL 4° up	21 gals. ea.	17 gals. ea.
Body CL 2° up	18 gals. ea.	17 gals. ea.
Body CL 0°	18 gals. ea.	23 gals. ea.
Body CL 2° down	18 gals. ea.	37 gals. ea.
Body CL 4° down	21 gals. ea.	55 gals. ea.
Body CL 6° down	27 gals. ea.	71 gals. ea.
Body CL 8° down	33 gals. ea.	86 gals. ea.

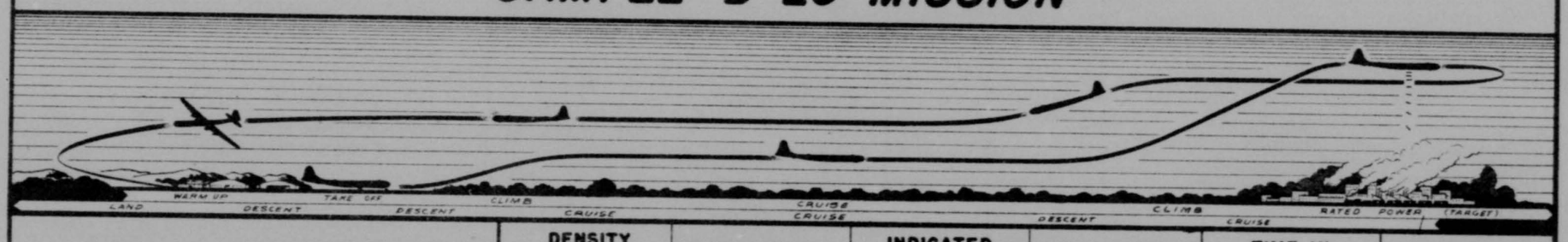
RESIDUAL FUEL IN CENTER TANKS WHEN FLYING WITH WINGS LEVEL

FLIGHT ATTITUDE	B29A CENTER SECTION TANKS	B29 CENTER SECTION TANKS	BOMB BAY TANKS
Body CL 2° up	0 gals.	17 gals.	3 gals. ea.
Body CL 4° up	1 gal.	24 gals.	9 gals. ea.
Body CL 0°	0 gals.	11 gals.	0 gals. ea.
Body CL 2° down	4 gals.	13 gals.	3 gals. ea.
Body CL 4° down	14 gals.	28 gals.	9 gals. ea.
Body CL 6° down	25 gals.	57 gals.	16 gals. ea.

RESIDUAL FUEL QUANTITIES FOR VARIOUS FLIGHT ATTITUDES WITH EITHER WING 2½° DOWN

FLIGHT ATTITUDE	TANK 1 Gals.	TANK 2 Gals.	TANK 3 Gals.	TANK 4 Gals.
Body CL 4° up	21	17	17	21
Body CL 2° up	18	18	16	18
Body CL 0°	18	32	14	18
Body CL 2° down	18	50	24	18
Body CL 4° down	21	72	38	21
Body CL 6° down	28	99	43	26
Body CL 8° down	36	121	51	30

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	1568
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 25% 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.

b. 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)

TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART

AS OF 29 JUNE 1945

MODEL & BLOCK NO.	ENGINE & PROP.			SIZE	WEIGHT		COMBAT CREW	FUEL & OIL		ARMAMENT			BOMBS			RADIO	REMARKS & REFERENCE
	NUMBER	ENGINE MFGR. MODEL SUPERCHARGER PROP. MFGR. 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	S-BASIC C-COMBAT W-WAR MAX. M-MAX. LAND.	✱ NOTES		FUEL TANKAGE: TYPE OR LOCATION (MAX. OIL) ALSO	FUEL TANKAGE: NO. AND CAPACITY (MAX. FUEL) ALSO	NO. GUNS AND SIZE	RDS. PER GUN	LOCATION AND TYPE	NO. AND SIZE: INTERNAL	NO. AND SIZE: EXTERNAL	MAX. LOAD	TYPICAL MODELS CARRIED	REFER TO PAGE 4 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 (LATEST MODEL)	4	WRIGHT R-3350-23, -23A, -41, -57 or -59 TURBO HAMILTON STD. 16'7" DIA. - 4 BL. F.F., HYDROMATIC	T 2200/ S L W 2500/ - a M 2200/25000 b C 2000/25000 b	S 141' 3" L 99' H 29' 7" T 31' 6" c W 1736 Sq. '	B 76000 C 120000 W 138000 ✱ M 120000		11 or 12	OUTBD.-WINGS INBD.-WINGS CENTER-WINGS BOMB BAY (340) ✱	14-2726 8-2912 4-1350 4x 640 (9548)	4) d 2) 2) .50 2) 2)	500 500 500 500 500	UPPER FORE TRR. UPPER REAR TRR. LOWER FORE TRR. LOWER REAR TRR. TAIL POWER MT.	1-4000 8-2000 12-1600 12-1000 40-500	NONE	20000	SEE NOTE (a)	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 -59. (b) RATINGS GIVEN WITHOUT RAM. (c) OUTBOARD TREAD 31'6"; INBOARD TREAD 25'5" (d) SEE PAGE OPPOSITE FOR ARMAMENT BREAKDOWN.
B-29B (LATEST MODEL)	4	AS ABOVE	AS ABOVE	AS ABOVE	B 77700 C 120000 W 138000 ✱ M 120000		10	AS ABOVE		d 2-.50	500	TAIL POWER MT.	AS ABOVE			AS ABOVE	
			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												
			T W M C	S L H T W	B C W M												

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': T.O. DIST.	TO CLEAR 50': LAND DIST.	LANDING SPEED	GROUND RUN: T.O. DIST.	GROUND RUN: LAND DIST.	WEIGHT	STD. ALT.	WAR EMERG.: HIGH SPEED	WAR EMERG.: RATE OF CLIMB	MIL. POWER: HIGH SPEED	MIL. POWER: RATE OF CLIMB	MAX. CONTIN. POWER: HIGH SPEED	MAX. CONTIN. POWER: RATE OF CLIMB	MAX. CONTIN. POWER: TIME TO CLIMB	LOADING: TAKE OFF WEIGHT	LOADING: BOMBS CARGO PASS.	LOADING: TOTAL FUEL	MAX. CONTINUOUS POWER at 10,000 FT.: RANGE	MAX. CONTINUOUS POWER at 10,000 FT.: ENDUR.	MAX. CONTINUOUS POWER at 25,000 FT.: RANGE	MAX. CONTINUOUS POWER at 25,000 FT.: ENDUR.	MAX. CRUISE POWER at 10,000 FT.: RANGE	MAX. CRUISE POWER at 10,000 FT.: ENDUR.	MAX. CRUISE POWER at 25,000 FT.: RANGE	MAX. CRUISE POWER at 25,000 FT.: ENDUR.	LONG RANGE at 10,000 FT.: RANGE	LONG RANGE at 10,000 FT.: ENDUR.	
	LB	FT.	FT.	M.P.H.	FT.	FT.	LB	FT.	M.P.H.	FT. MIN.	M.P.H.	FT. MIN.	M.P.H.	FT. MIN.	MIN.	LB	LB	U.S. GAL.	MILES	HOURS	MILES	HOURS	MILES	HOURS	MILES	HOURS	MILES	HOURS	
B-29 & A	80000	-	-	-	-	-	120000	30000	367	550	351	900	342	150	72.0	133000	NONE	* 8268	-	-	-	-	-	-	-	-	4550	20.6	(a) PERFORMANCE GIVEN WITHOUT "EAGLE WING".
	90000	-	4400	105	-	3200		25000	355	700	340	450	331	300	52.0	135000	12000	6988	1800	6.0	1950	6.0	2550	9.5	2500	8.7	3700	16.4	✱ 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.
	100000	4600	-	110	3100	-		20000	353	825	338	575	329	425	38.0	127000	4000	6918	1800	5.9	2000	6.0	2550	9.4	2550	8.9	3800	17.7	
	110000	5700	-	115	3900	-		15000	341	900	326	650	313	500	28.0	120000	3000	5938	1500	4.9	1600	4.8	2100	7.7	2100	7.2	3200	14.6	
	120000	7200	-	120	4900	-		10000	330	975	315	725	303	575	18.0	135000	20000	5638	1450	4.9	1550	4.9	2050	7.6	1950	6.9	2850	12.6	UNUSABLE FUEL MAY BECOME APPRECIABLE ON ALL B-29's AT CERTAIN ANGLES OF BODY CENTER LINE: SEE PAGE OPPOSITE
	135000	8900	-	-	6700	-		5000	314	1050	301	800	288	650	8.0														
B-29B *	A S A B O V E						120000	30000	384	550	361	900	348	150	72.0	132000	NONE	6908	-	-	-	-	-	-	-	-	5200	24.2	FLIGHT TEST REQUESTED
								25000	364	700	348	450	338	300	52.0	131000	12000	6988	1850	6.0	1950	6.0	2650	9.5	2650	8.9	4000	17.3	
								20000	381	825	345	575	335	425	38.0	135000	16000	6988	1850	6.0	1950	6.0	2600	9.5	2600	8.7	3850	17.1	
								15000	347	900	332	650	320	500	28.0	131000	20000	5638	1500	4.9	1550	4.8	2100	7.7	2100	7.0	3100	13.7	
								10000	336	975	322	725	308	575	18.0														
								5000	320	1050	306	800	293	650	8.0														

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:

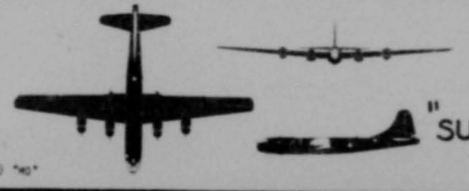
(A)

B-29 & A	B-29B	NAME
AN/APN-1	AN/APN-1	GLIDE PATH
AN/APS-3	AN/APS-3	COMPASS
AN/APS-4	AN/APS-4	RADAR
AN/APT-1	AN/APT-1	TEST
AN/APX-1	AN/APX-1	IFF
AN/ARC-1	AN/ARC-1	MARKER BEACON
AN/ARC-2	AN/ARC-2	"N" SET
AN/ARC-3	AN/ARC-3	LIAISON
AN/ARC-4	AN/ARC-4	VHF
AN/ARN-3	AN/ARN-3	ZERO IN BEACONS
AN/ARR-2	AN/ARR-2	OMNI TRANSMITTER
AN/APN-9	AN/APN-9	DOPPLER
AN/APS-13	AN/APS-13	TAIL WARNING
-	AN/APQ-7 *	BOMB "LABAR"
-	AN/APQ-13 *	BOMB "H2X"
-	AN/APS-15	RADAR
-	AN/APS-23	TAIL "TAIL"

*PROJECTIONS ONLY

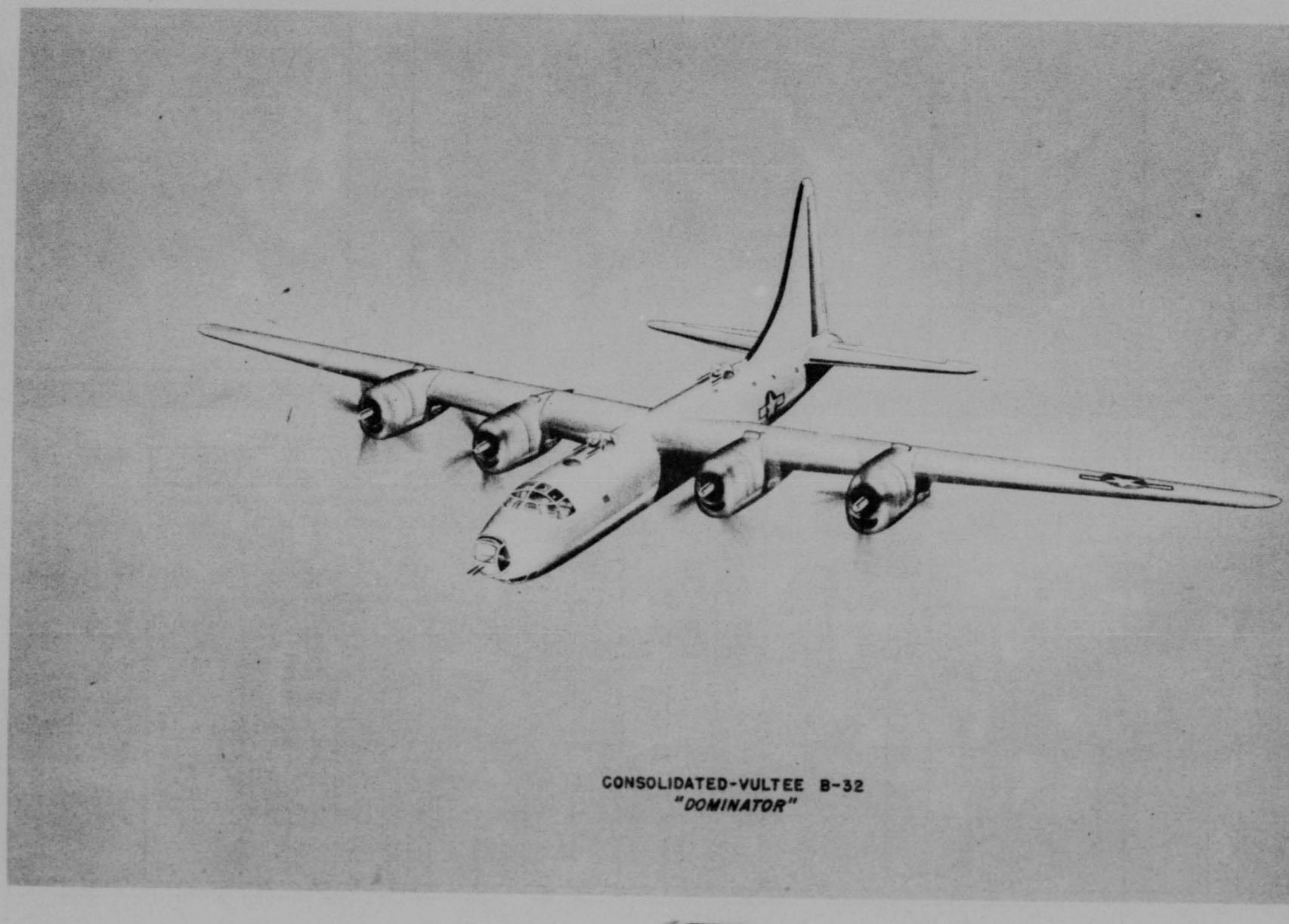
RED FIGURES ARE PRELIMINARY: SUBJECT TO REVISION AFTER FLIGHT CHECK.

MANUFACTURED BY BELL (ATLANTA) "BA"; BOEING (RENTON) "BM"; BOEING (WICHITA) "BW" & MARTIN (OMAHA) "MO"



B-29

"SUPER FORTRESS"



CONSOLIDATED-VULTEE B-32
"DOMINATOR"

TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART

PAGE 15

AS OF 29 JUNE 1945

MODEL & BLOCK NO.	ENGINE & PROP. NUMBER	ENGINE MFGR. MODEL SUPERCHARGER PROP. MFGR. TYPE	B.H.P./ALT. T-TAKE OFF W-WAR EMERG. M-MILITARY C-CONTINUOUS	SIZE S-SPAN L-LENGTH H-HEIGHT T-TREAD W-WING AREA	WEIGHT B-BASIC C-COMBAT W-WAR MAX. M-MAX LAND	NOTES	COMBAT CREW	FUEL & OIL: FUEL TANKAGE: TYPE OR LOCATION ALSO (MAX. OIL)	FUEL & OIL: FUEL TANKAGE: NO. AND CAPACITY ALSO (MAX. FUEL)	ARMAMENT (INCLUDES SIZE INSTALLATION): NO. GUNS AND SIZE	ARMAMENT: RDS. PER GUN	ARMAMENT: LOCATION AND TYPE	BOMBS: NO. AND SIZE: INTERNAL	BOMBS: NO. AND SIZE: EXTERNAL	BOMBS: MAX. LOAD	RADIO: TYPICAL MODELS CARRIED	REMARKS & REFERENCE
B-32-CF -1 thru -35	4	WRIGHT R-3350-23 TURBO CURTISS 16'8"DIA.-4 BL. CONST. SPD., ELECTRIC	T 2200/ S.L. W NONE M 2200/34000 C 2000/32500	S 135'0" L 82'1" H 33'0" T 28'0" W 1422 Sq.	B 62500 C 100000 W 114000 * M 100600	[illegible]	10	INBOARD-WINGS OUTBOARD-WINGS BOMB BAY [a] (302)	6- 3450 6- 7010 2 x 750 (6960)	2) 2) 2) .50 2) 2)	365 [b] 400 400 550 1000	NOSE TURRET FRONT TOP TURRET REAR TOP TURRET LOW. BALL TURRET TAIL TURRET	4-4000 8-2000 8-1500 12-1000 40- 500	NONE	20000	SEE NOTE (A)	REFER TO PAGE 4 FOR "FOREWORD." REFER TO PAGE 3 FOR SECURITY CLASSIFICATION. REFER TO PAGE 5 FOR DEFINITIONS. REFER TO T.O. LISTED FOR DETAILED PLANNING. B-32 TECH. ORDER 01-SEQ-1 (5 MARCH 1945) (a) BEGINNING WITH B-32-25 CF, PROVISIONS FOR INSTALLATION OF 2 BOMB BAY TANKS: 4 BOMB BAY TANKS CAN BE CARRIED IF SPECIAL INSTALLATION IS MADE. (b) NORMAL ROUNDS LISTED: SPACE PROVISIONS FOR 600 RDS. PER GUN.
			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												
			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												
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): GROSS WEIGHT LB	TO CLEAR 50': T.O. DIST. FT	TO CLEAR 50': LAND DIST. FT	LANDING SPEED M.P.H.	GROUND RUN: T.O. DIST. FT	GROUND RUN: LAND DIST. FT	HIGH SPEED & CLIMB (CLEAN AIRPLANE AT NORMAL COMBAT WEIGHT): WEIGHT LB	STD. ALT. FT	WAR EMERG.: HIGH SPEED M.P.H.	WAR EMERG.: RATE OF CLIMB FT. MIN.	MIL. POWER: HIGH SPEED M.P.H.	MIL. POWER: RATE OF CLIMB FT. MIN.	MAX. CONTIN. POWER: HIGH SPEED M.P.H.	MAX. CONTIN. POWER: RATE OF CLIMB FT. MIN.	MAX. CONTIN. POWER: TIME TO CLIMB MIN.	RANGE AND ENDURANCE (STATUTE AIR MILES - NO WIND - NO ALLOWANCE FOR RESERVE): LOADING: TAKE OFF WEIGHT LB	LOADING: BOMBS ~~CARGO~~ PASS. LB	LOADING: TOTAL FUEL U.S. GAL.	MAX. CONTINUOUS POWER at 10000 FT.: RANGE MILES	MAX. CONTINUOUS POWER at 10000 FT.: ENDUR. HOURS	MAX. CONTINUOUS POWER at 25000 FT.: RANGE MILES	MAX. CONTINUOUS POWER at 25000 FT.: ENDUR. HOURS	MAX. CRUISE POWER at 10,000 FT.: RANGE MILES	MAX. CRUISE POWER at 10,000 FT.: ENDUR. HOURS	MAX. CRUISE POWER at 25,000 FT.: RANGE MILES	MAX. CRUISE POWER at 25,000 FT.: ENDUR. HOURS	LONG RANGE at 10,000 FT.: RANGE MILES	LONG RANGE at 10,000 FT.: ENDUR. HOURS	REMARKS
B-32-CF -1 thru -35	* 70000 80000 90000 100000 110000 120000	- 3800 4500 5700 7300 9300	3700 4100 4600 5000 - -	88 96 106 118 - -	- 2900 3400 4300 5500 7000	-2200 2600 2900 3200 - -	100000	30000 25000 20000 15000 10000 5000	NONE		857 347 324 312 296 281	350 550 700 850 950 1050	311 300 289 279 269	400 500 650 750 850	38.0 27.5 19.0 12.0 6.0	* 111500 119500 109000 121000	NONE 8000 8000 20000	6960 6960 5460 5460	- 1700 1350 1300	- 5.8 4.5 4.5	- 1400 ABOVE PRAC. CEIL.	- 4.8	- 2650 2100 2050	- 10.5 8.2 8.2	- 2700 2200 ABOVE	- 9.7 7.8 PRAC. CEIL.	3800 3300 2900 2400	21.0 18.0 16.0 13.0	FLIGHT TEST IN PROGRESS
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

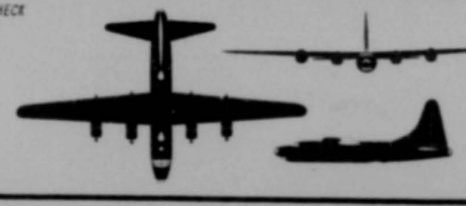
NOTES:

(A)

SCR-274N	COMMAND SET
SCR-695	IFF
SCR-1178	EMERGENCY TRANSMITTER
SCR-729	AIRBORNE INTERROGATOR
RC-103 } AN/ARN-1 }	BLIND LANDING
RC-193	MARKER BEACON
RC-210	RADIO FILTER
AN/ARN-7	RADIO COMPASS
AN/APN-1	LOW ALT. RADIO ALTIMETER
AN/ARC-38	LAB
AN/ARC-27	RTO
AN/APN-4	LORAN
AN/ASA-1	STATIC DISCHARGER
AN/AIC-2	INTERPHONE
MCW	PROVISIONS

RED FIGURES ARE PRELIMINARY: SUBJECT TO REVISION AFTER FLIGHT CHECK

* MAX. WEIGHT HAS BEEN TENTATIVELY RESTRICTED TO 114000 LB. PENDING COMPLETION OF STATIC TESTS.

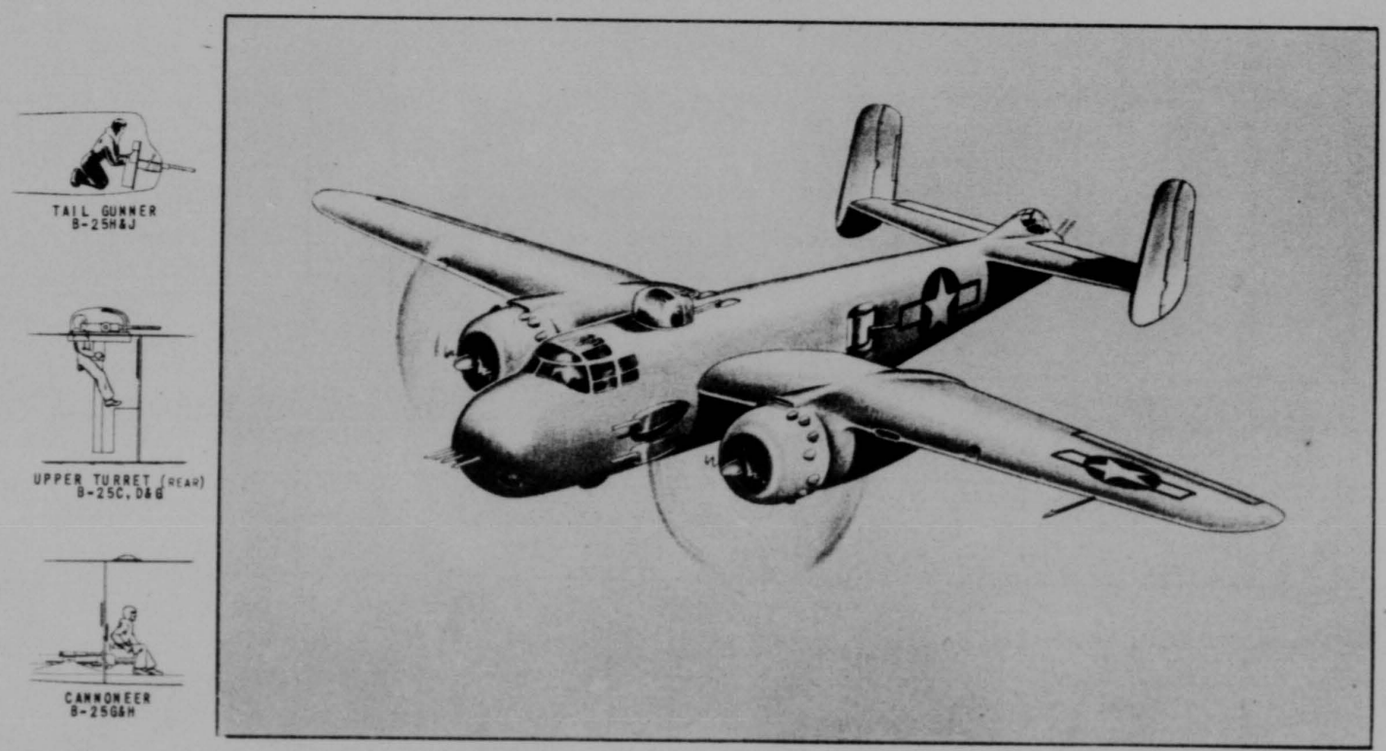


B-32

"DOMINATOR"

MANUFACTURED BY CONSOLIDATED - VULTEE (SAN DIEGO) "CO" & CONSOLIDATED - VULTEE (FT. WORTH) "C1"

B-25 MITCHELL BOMBER

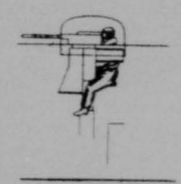


B-25H

TAIL GUNNER
B-25H&J

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

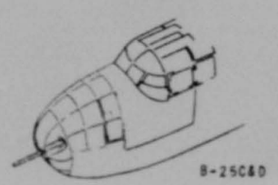
CANNONEER
B-25G&H



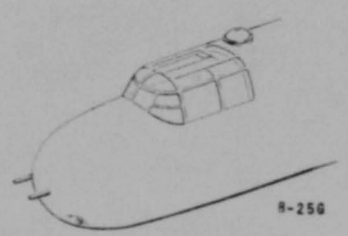
UPPER TURRET (FRONT)
B-25H&J

BOTTOM TURRET
B-25C, D, &G

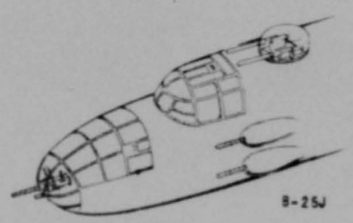
WAIST GUNNER
B-25H&J



B-25C&D



B-25G



B-25J

TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART

AS OF 29 JUNE 1945

MODEL & BLOCK NO.	ENGINE & PROP. NUMBER	ENGINE MFGR. MODEL SUPERCHARGER PROP. MFGR. TYPE	B.H.P./ALT. T- TAKE OFF W- WAR EMERG. M- MILITARY C- CONTINUOUS	SIZE S-SPAN L-LENGTH H-HEIGHT T-TREAD W-WING AREA	WEIGHT B-BASIC C-COMBAT W-WAR MAX. M-MAX LAND.	* NOTES	COMBAT CREW	FUEL & OIL FUEL TANKAGE TYPE OR LOCATION (MAX. OIL)	FUEL & OIL FUEL TANKAGE NO. AND CAPACITY (MAX. FUEL)	ARMAMENT (NO. ROCKETS-SIZE-INSTALLATION) NO. GUNS AND SIZE	ARMAMENT RDS. PER GUN	ARMAMENT LOCATION AND TYPE	BOMBS NO. AND SIZE INTERNAL	BOMBS NO. AND SIZE EXTERNAL	BOMBS MAX. LOAD	RADIO TYPICAL MODELS CARRIED (SEE "A")	REMARKS & REFERENCE
B-25C-NA -1 thru -25 B-25D-NC -1 thru -35	2	WRIGHT R-2600-13 or -29 2 SPD. SUPERCH. HAMILTON STD. 12'7" DIA.-3 BL. F.F., HYDROMATIC	T 1700/ S L W 1850/ S L(-13) 1800/ S L(-29) M 1700/ 4500 1400/ 13000 C 1500/ 6700 1202/ 13100	S 67' 6" L 52' 11" H 15' 9" T 19' 4" W 610 Sq. '	B 22000 C 33500 W 35000* M 32200	TIRES & FLIGHT CHARACTERISTICS CRITICAL ABOVE 35000 LBS.	5	MAIN - WINGS 2 x 184 MAIN - WINGS 2 x 151 AUX. - WINGS 6 - 304 SIDE WAIST 1 x 125 BOMB BAY 2 - 550 or 1 x 585 (75) b (1684)		1) 300 1) 300 2) .50 400 2) 350 ★★	c NOSE - FLEX. NOSE - FIXED UPPER TURRET LOWER TURRET (SOME MODELS)	1-2000 2-1600 d 3-1000 6- 500 8- 250 12- 100	1-2000 T 6- 325 8- 250 8- 100	2-1600 8- 250 x 5200	SCR-211 SCR-269G SCR-274N SCR-287A SCR-522 SCR-535 SCR-578 SCR-595 SCR-695 AN/ARN-7 RC-32 RC-36 RC-438 RC-103 RC-196 RC-198	B-25C & D TECH. ORDER 01-60GB-1. (REV. 30 AUG. 1944) B-25G TECH. ORDER 01-60GC-1. (REV. 10 DEC. 1944) B-25H TECH. ORDER 01-60GD-1. (REV. 10 FEB. 1945) B-25J TECH. ORDER 01-60GE-1. (REV. 25 MARCH 1945) (a) LENGTH B-25C's IS 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 500 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 ★★ 8(5") AR OR HVAR INSTALLED ON SOME SERVICE MODELS.
B-25G-NA -1 thru -10	2	AS ABOVE	T W M C AS ABOVE	S 67' 6" L 51' H 15' 9" T 19' 4" W 610 Sq. '	B 21700 C 33500 W 35000* M 32200		5	MAIN - WINGS 2 x 184 MAIN - WINGS 2 x 151 AUX. - WINGS 6 - 304 SIDE WAIST 1 x 125 BOMB BAY e 2 - 550 or 1 x 585 (75) (1949)		1-75mm 2) .50 2) .50	21 400 400 350 ★★	NOSE - CANNON M4 NOSE - FIXED UPPER TURRET LOWER TURRET (SOME MODELS)	A S	A B O V E		SCR-211 SCR-269G SCR-274N SCR-287A SCR-522 SCR-535 SCR-578 SCR-595 SCR-695 AN/ARN-7 RC-32 RC-36 RC-438 RC-103 RC-196 RC-198	
B-25H-NA -1 thru -10	2	AS ABOVE	T W M C AS ABOVE	S 67' 7" L 51' H 15' 9" T 19' 4" W 610 Sq. '	B 22000 C 33500 W 35000* M 32200		4	MAIN - WINGS 2 x 184 MAIN - WINGS 2 x 151 AUX. - WINGS 6 - 304 SIDE WAIST 2 x 50 BOMB BAY e 2 - 500 or 1 x 585 (75) (1924)		1-75mm 4) .50 2) .50	21 400 400 200 400 600★★	NOSE-CANNON T13E1 NOSE - FIXED FORE - PACKAGE SIDE WAIST - FL. UPPER TURRET TAIL POWER MT.	1-2000 g 2-1600 3-1000 6- 500 8- 250 12- 100	1-2000 T	3200		
B-25J-NC -1 thru -35	2	AS ABOVE	T W M C AS ABOVE	S 57' 7" L 52' 11" H 15' 9" T 19' 4" W 610 Sq. '	B 21100 C 33500 W 35000* M 32200		5	AS ABOVE		1) 300 2) 300 4) .50 400 2) 250 2) 400 2) 600★★	NOSE - FLEX. NOSE - FIXED FORE - PACKAGE SIDE WAIST - FL. UPPER TURRET TAIL POWER MT.	1-2000 g 2-1600 3-1000 6- 500 8- 250 12- 100	AS ABOVE EXCEPT MOUNTING LUGS & CONTROLS FOR EXTERNAL WING BOMBS INSTALLED ON LAST 250 B-25J-10 AND SUBSEQUENT.			
			T W M C	S L H T W	B C W M												
COLUMN	1	2 3	4	5	6 7	8	9	10		11 12	13	14	15 16		17	18	

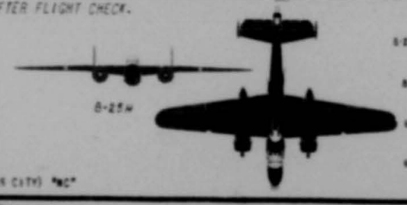
MODEL & BLOCK NO.	TAKE OFF & LANDING HARD SURFACE-NO WIND GROSS WEIGHT	TO CLEAR 50' T.O. DIST.	TO CLEAR 50' LAND DIST.	LANDING SPEED	GROUND RUN T.O. DIST.	GROUND RUN LAND DIST.	HIGH SPEED & CLIMB CLEAN AIRPLANE AT NORMAL COMBAT WEIGHT WEIGHT	STD. ALT.	WAR EMERG. HIGH SPEED	WAR EMERG. RATE OF CLIMB	MIL. POWER HIGH SPEED	MIL. POWER RATE OF CLIMB	MAX. CONTIN. POWER HIGH SPEED	MAX. CONTIN. POWER RATE OF CLIMB	MAX. CONTIN. POWER TIME TO CLIMB	RANGE AND ENDURANCE STATUTE AIR MILES-NO WIND- NO ALLOWANCE FOR RESERVE LOADING TAKE OFF WEIGHT	LOADING BOMBS ~~CARGO~~ ~~PASS~~	LOADING TOTAL FUEL	MAX. CONTINUOUS POWER at 10000 FT. RANGE	MAX. CONTINUOUS POWER at 10000 FT. ENDUR.	MAX. CONTINUOUS POWER at 20000 FT. RANGE	MAX. CONTINUOUS POWER at 20000 FT. ENDUR.	MAX. CRUISE POWER at 10,000 FT. RANGE	MAX. CRUISE POWER at 10,000 FT. ENDUR.	MAX. CRUISE POWER at 20000 FT. RANGE	MAX. CRUISE POWER at 20000 FT. ENDUR.	LONG RANGE at 10,000 FT. RANGE	LONG RANGE at 10,000 FT. ENDUR.	REMARKS
	LB	FT	FT	M.P.H.	FT	FT	LB	FT	M.P.H.	FT/MIN	M.P.H.	FT/MIN	M.P.H.	FT/MIN	MIN.	LB	LB	U.S. GAL	MILES	HOURS	MILES	HOURS	MILES	HOURS	MILES	HOURS	MILES	HOURS	
B-25C-NA -1 thru -25 B-25D-NC -1 thru -35	24000 27000 30000 32900 35000	- 2900 4000 4800 6000	3300 3500 3800 - -	105 110 112 - -	- 2300 3200 3900 4800	1500 1700 1900 - -	31500	20000 15000 10000 5000 S L	NOT AVAILABLE		265 284 283 282 264	- 610 880 1225 1375	260 280 276 274 257	- 550 830 1150 1200	- 16.5 9.5 4.3 0.0	34900 34000 33200 32200 35000 *	NONE NONE 3200 2000 T 5200	1684 1559 974 974 974	1375 1275 775 750 725	5.2 4.7 2.9 3.0 2.9	1450 z 1300 z 800 ABOVE PRAC- TICAL CEILING	5.7 z 5.2 z 3.3	2350 2200 1350 1250 1100	10.3 9.4 5.7 5.5 5.0	2175 z 1950 z 1175 ABOVE PRAC- TICAL CEILING	10.0 z 9.0 z 5.3	2650 2500 1525 1350 1225	12.6 11.8 7.3 7.1 6.1	(b) SPEED LESS THAN FOR MAX. CONTINUOUS POWER DUE TO HIGH TIP SPEED LOSS. (z) FIRST PART OF FLIGHT AT 15000 FT. ★ LIMIT DISPOSABLE ITEMS SO AS NOT TO EXCEED A LOADING OF 35000 LB. GROSS WEIGHT.
B-25G-NA -1 thru -10	A S	A B O V E					31500	20000 15000 10000 5000 S L	AS ABOVE		281 278 265 268	610 880 1225 1375	277 274 276 257	550 830 1150 1200	18.5 9.5 4.3 0.0	34900 34000 33700 33900 35000	NONE NONE 2000 2000 T 5200	1648 1529 1189 1189 974	1275 1175 900 875 675	4.8 4.4 3.4 3.5 2.8	ABOVE PRACTICAL CEILING		1725 1575 1175 1025 850	8.5 7.8 5.9 5.1 4.9	ABOVE PRACTICAL CEILING		2200 2000 1525 1350 850	12.6 11.4 8.6 8.1 4.9	
B-25H-NA -1 thru -10	A S	A B O V E					31500	20000 15000 10000 5000 S L	AS ABOVE		248 h 270 h 256 272 266	285 600 750 1125 1290	250 275 263 264 253	230 540 700 1050 1110	31.7 19.0 11.1 5.0 0.0	35000 * 35000 * 35000 35000 * 34600	NONE NONE 2000 2000 T 3200	1624 1524 1189 1189 974	1275 1175 900 875 725	4.8 4.4 3.4 3.5 2.8	1150 1050 755 IMPRACTICAL 575	4.7 4.4 3.3 2.7	2200 1900 1525 1400 1200	9.2 8.5 6.8 6.4 5.2	1875 z 1700 z 1200 z IMPRACTICAL 900 z	8.3 z 7.6 z 5.4 z 4.5 z	2650 2275 1700 1575 1300	12.0 10.8 8.1 8.0 6.2	
B-25J-NC -1 thru -35	A S	A B O V E			A S	A B O V E										34900 34000 33800 34000 33100	NONE NONE 2000 2000 T 3200	1624 1524 1189 1189 974	A S	A B O V E								
	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

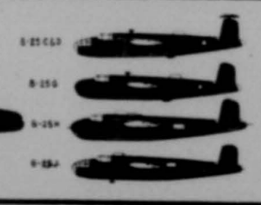
NOTES: (a) SEVEN OR MORE OF FOLLOWING:

SCR-211 FREQUENCY METER
SCR-269G RADIO COMPASS
SCR-274N COMMAND SET
SCR-287A LIAISON SET
SCR-522 COMMAND SET
SCR-535 SET
SCR-578 EMERGENCY TRANSMITTER
SCR-595 SET
SCR-695 SET
AN/ARN-7 RADIO COMPASS
RC-32 FILTER EQUIPMENT
RC-36 INTERPHONE AMPLIFIER
RC-438 MARKER BEACON
RC-103 LOCALIZER
RC-196 CONTACTOR UNIT
RC-198 FILTER EQUIPMENT
RC-195 MARKER BEACON
AN-AIC-2 INTERPHONE
AN-APN-1 LOW ALT. ALTIMETER
AN-ARN-5 GLIDE PATH
AN-ASA-1 STATIC DISCHARGE

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

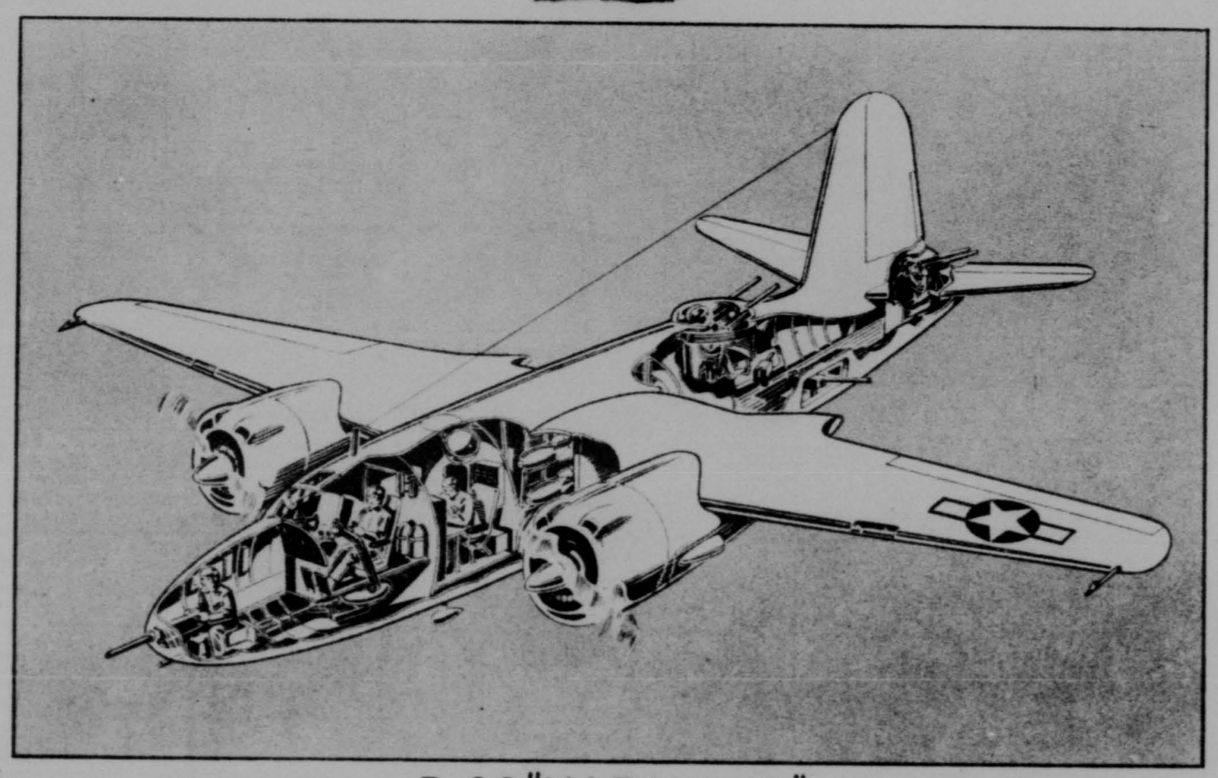
MANUFACTURED BY NORTH AMERICAN (INGLEWOOD) "NA" & (KANSAS CITY) "NC"





B-25 "MITCHELL"

[redacted]



B-26 "MARAUDER"

[redacted]

TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART

AS OF 28 JUNE 1945

MODEL & BLOCK NO.	ENGINE & PROP. NUMBER	ENGINE MFGR. MODEL SUPERCHARGER PROP. MFGR. TYPE	B.H.P./ALT. T-TAKE OFF W-WAR EMERG. M-MILITARY C-CONTINUOUS	SIZE S-SPAN L-LENGTH H-HEIGHT T-TREAD W-WING AREA	WEIGHT B-BASIC C-COMBAT W-WAR MAX. M-MAX LAND.	NOTES * FLIGHT CHARACTERISTICS CRITICAL ABOVE 38200 LB.	COMBAT CREW
B-26B-MA -10 thru -20 B-26C-MO -5 thru -25	2	PRATT-WHITNEY R-2800-43 2 SPD. SUPERCHARGER CURTISS 13'6"DIA.-4 BL. F.F., ELECTRIC	T 1920/ S L W NONE M 1920/ 3200 1490/14300 C 1550/ 7100 1350/14600	S 71' 0" L 58' 3" H 21' 6" T 22' 0" W 659 Sq. '	B 25300 C 37000 W 38200 * M 34000		6
B-26B-MA -25 thru -55 B-26C-MO -30 & -45	2	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE		6
B-26F-MA -1,-2 & -6 B-26G-MA -1 thru -25	2	AS ABOVE	AS ABOVE	S 71' 0" L 56' 1" H 20' 4" T 22' 0" W 658 Sq.	B 25500 C 37000 W 38200 * M 34000		6
			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		
COLUMN 1	2	3	4	5	6	7	8

MODEL & BLOCK NO.	FUEL & OIL: FUEL TANKAGE TYPE OR LOCATION ALSO (MAX. OIL)	FUEL & OIL: FUEL TANKAGE NO. AND CAPACITY ALSO (MAX. FUEL)	ARMAMENT (NO. ROCKETS-SIZE-INSTALLATION): NO. GUNS AND SIZE	RDS. PER GUN	LOCATION AND TYPE	BOMBS NO. AND SIZE: INTERNAL	EXTERNAL	MAX. LOAD	RADIO: TYPICAL MODELS CARRIED (SEE A)	REMARKS & REFERENCE
B-26B-MA -10 thru -20 B-26C-MO -5 thru -25	MAIN - WINGS AUX. - WINGS BOMB BAY (FORE & REAR) (83)	2 x 360 2 x 121 4 x 250 (1962)	1) 1) 2) 2) - 50 2) 2) 2)	200 270 240 250 200 400 800	NOSE - FIXED NOSE - FLEX. SIDE WAIST - FLEX. U. FUSEL. - PACKAGE L. FUSEL. - PACKAGE UPPER TURRET TAIL-POWER MOUNT	2-2000 2-1600 4-1000 8- 500 16- 250 30- 100	1-2000T TORPEDO	2-1600 1-2000T 5200	SCR-211 SCR-259G SCR-274 SCR-287A SCR-522 SCR-535 SCR-578 SCR-595 SCR-695 RC-36 RC-438 RC-103 RC-198 RC-32	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 ROUNDS 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-26B-MA -25 thru -55 B-26C-MO -30 & -45	MAIN - WINGS AUX. - WINGS BOMB BAY (FORE ONLY) (83)	2 x 360 2 x 121 2 x 250 (1462)	AS ABOVE EXCEPT FIXED NOSE GUN DELETED ON LATEST MODELS			2-2000 2-1600 4-1000 6- 500 b 10- 250 b 20- 100 b	AS ABOVE			
B-26F-MA -1,-2 & -6 B-26G-MA -1 thru -25	MAIN - WINGS AUX. - WINGS BOMB BAY (FORE ONLY) (83)	2 x 380 c 2 x 121 2 x 250 (1502)	1) 2) 2) - 50 2) 2) 2)	300 250 275 225 400 900	NOSE - FLEX. SIDE WAIST - FLEX. U. FUSEL. - PACKAGE L. FUSEL. - PACKAGE UPPER TURRET TAIL-POWER MOUNT	2-2000 2-1600 4-1000 6- 500 b 10- 250 b 20- 100 b	NONE	4000		
COLUMN	9	10	11	12	13	14	15	16	17	18

MODEL & BLOCK NO.	TAKE OFF & LANDING (HARD SURFACE - NO WIND): GROSS WEIGHT LB	TO CLEAR 50' T.O. DIST. FT	TO CLEAR 50' LAND DIST. FT	LANDING SPEED M.P.H.	GROUND RUN T.O. DIST. FT	GROUND RUN LAND DIST. FT
B-26B-MA -10 thru -20 B-26C-MO -5 thru -25	28000 32000 34000 36000 38200	- 3000 3500 4000 4400	3400 3900 4200 - -	135 136 138 - -	- 1900 2300 2700 3000	1800 2000 2200 - -
B-26B-MA -25 thru -55 B-26C-MO -30 & -45	ABOVE					
B-26F-MA -1,-2 & -6 B-26G-MA -1 thru -25	28000 32000 34000 36000 38200	- 2500 3000 3500 4200	- - - - -	122 124 125 - -	- 1800 2200 2500 2800	- - - - -
19	20	21	22	23	24	25

MODEL & BLOCK NO.	HIGH SPEED & CLIMB (CLEAN AIRPLANE AT NORMAL COMBAT WEIGHT): WEIGHT LB	STD. ALT. FT	WAR EMERG. HIGH SPEED M.P.H.	WAR EMERG. RATE OF CLIMB FT. MIN.	MIL. POWER HIGH SPEED M.P.H.	MIL. POWER RATE OF CLIMB FT. MIN.	MAX. CONTIN. POWER HIGH SPEED M.P.H.	MAX. CONTIN. POWER RATE OF CLIMB FT. MIN.	MAX. CONTIN. POWER TIME TO CLIMB MIN.
B-26B-MA -10 thru -20 B-26C-MO -5 thru -25	37000	20000 15000 10000 5000 S L	NONE		- 282 278 285 270	- 500 800 1000 1200	- 278 265 259 254	- 450 600 900 875	- 23.0 13.0 6.0 0.0
B-26B-MA -25 thru -55 B-26C-MO -30 & -45	ABOVE								
B-26F-MA -1,-2 & -6 B-26G-MA -1 thru -25	37000	20000 15000 10000 5000 S L	NONE		255 d 274 277 283 281	- - - - 1000	258 274 269 258 242	- 350 390 630 800	- 31.6 17.2 8.1 0.0
26	27	28	29	30	31	32	33	34	

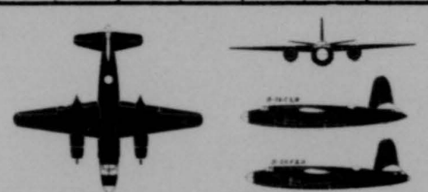
MODEL & BLOCK NO.	RANGE AND ENDURANCE (STATUTE AIR MILES - NO WIND - NO ALLOWANCE FOR RESERVE): LOADING TAKE OFF WEIGHT LB	LOADING BOMBS ~~CARGO~~ PASS. LB	LOADING TOTAL FUEL U.S. GAL	MAX. CONTINUOUS POWER at 10000 FT. RANGE MILES	MAX. CONTINUOUS POWER at 10000 FT. ENDUR. HOURS	MAX. CONTINUOUS POWER at 20000 FT. RANGE MILES	MAX. CONTINUOUS POWER at 20000 FT. ENDUR. HOURS	MAX. CRUISE POWER at 10,000 FT. RANGE MILES	MAX. CRUISE POWER at 10,000 FT. ENDUR. HOURS	MAX. CRUISE POWER at 20000 FT. RANGE MILES	MAX. CRUISE POWER at 20000 FT. ENDUR. HOURS	LONG RANGE at 10,000 FT. RANGE MILES	LONG RANGE at 10,000 FT. ENDUR. HOURS	REMARKS
B-26B-MA -10 thru -20 B-26C-MO -5 thru -25	38200 * 37800 38200 * 36300 38100	NONE NONE 1500 2000 4000	1962 1462 1462 962 962	1425 1000 1000 700 650	5.2 3.8 3.8 2.5 2.5	z 1600 1075 z 1075 675 675	z 6.4 4.9 z 4.9 3.0 3.1	2375 1725 1700 1100 1050	10.6 7.8 7.8 4.9 4.9	z 2050 1425 z 1400 800 800	z 9.1 6.5 z 6.5 4.0 4.1	2500 1825 1800 1200 1075	13.3 9.2 9.2 6.2 5.4	(d) SPEED LESS THAN FOR MAX. CONTINUOUS POWER DUE TO HIGH TIP SPEED LOSS. * LIMIT DISPOSABLE ITEMS SO AS NOT TO EXCEED A LOADING OF 38200 LB. GROSS WEIGHT. (e) FIRST PART OF EACH FLIGHT AT 15000 FT.
B-26B-MA -25 thru -55 B-26C-MO -30 & -45	37800 36300 38100	NONE 2000 4000	1462 962 962	1000 700 650	3.8 2.5 2.5	z 1075 675 675	z 7.8 4.9 4.9	1725 1100 1050	7.8 4.9 4.9	z 1425 800 800	z 6.5 4.0 4.1	1825 1200 1075	9.2 6.2 5.4	
B-26F-MA -1,-2 & -6 B-26G-MA -1 thru -25	38000 36200 38200 *	NONE 2000 4000	1502 1002 1002	1050 725 675	3.9 2.6 2.6	z 1175 700 700	z 5.1 3.1 3.2	1775 1150 1100	8.0 5.1 5.1	z 1525 900 900	z 6.7 4.2 4.3	1875 1250 1125	9.6 6.5 5.7	
35	36	37	38	39	40	41	42	43	44	45	46	47	48	

NOTES:

(A) NINE OR MORE OF FOLLOWING:

SCR-211	FREQUENCY METER
SCR-259G	RADIO COMPASS
SCR-274A	COMMAND SET
SCR-287A	LIAISON SET
SCR-522	COMMAND SET
SCR-535	SET
SCR-578	FREQUENCY METER
SCR-595	SET (IFF)
SCR-695	SET (IFF)
RC-32	FILTER EQUIPMENT
RC-36	INTERPHONE AMPLIFIER
RC-438	MARKER BEACON
RC-103	LOCALIZER
RC-198	FILTER EQUIPMENT

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

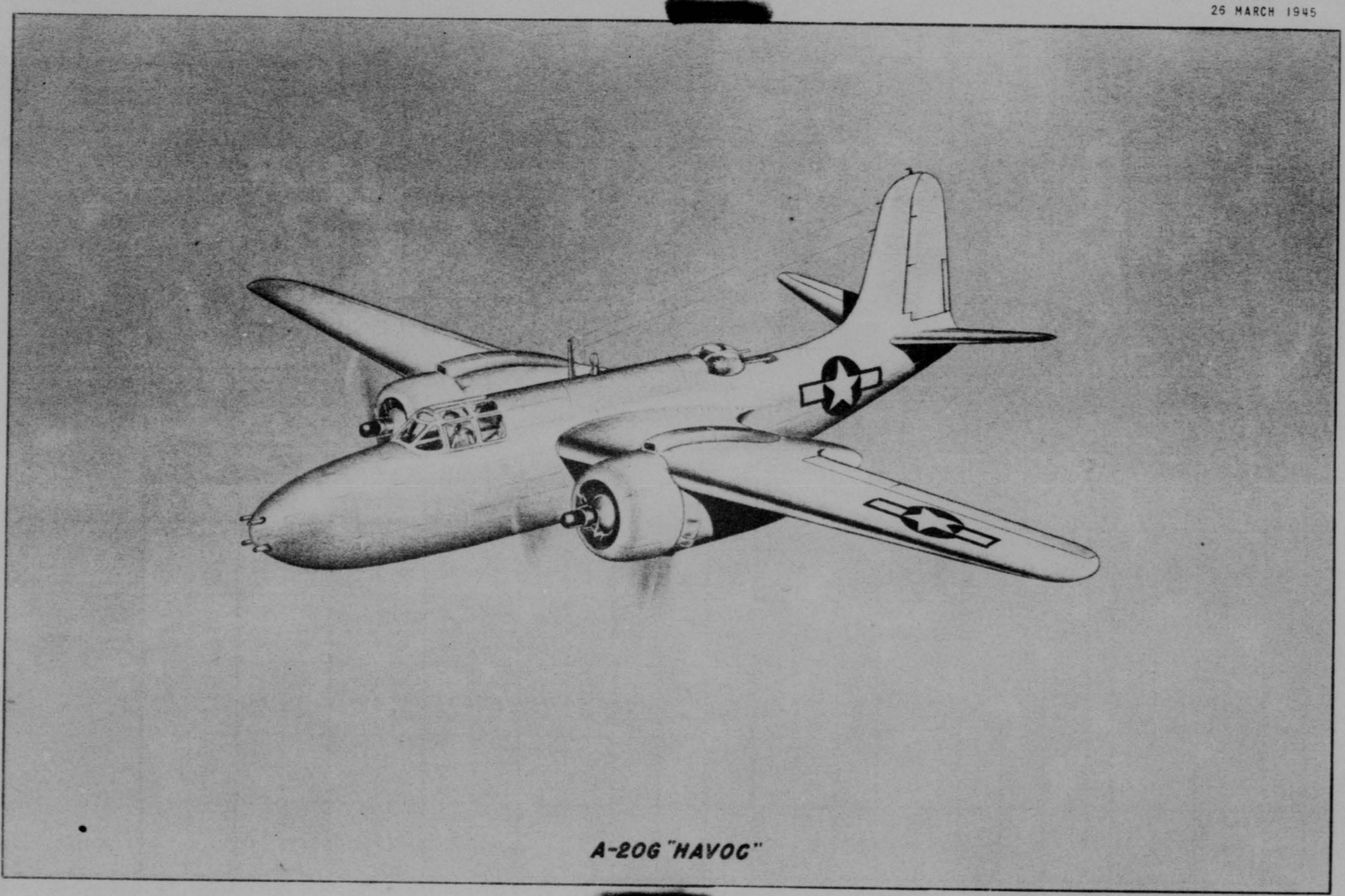


B-26

"MARAUDER"

MANUFACTURED BY MARTIN (BALTIMORE) "MA" & (OMAHA) "MO"

[redacted]



A-20G "HAVOC"

[redacted]

TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART

PAGE 21 — AS OF 29 JUNE 1945

MODEL & BLOCK NO.	ENGINE & PROP. NUMBER	ENGINE MFGR. MODEL SUPERCHARGER PROP. MFGR. TYPE	B.H.P./ALT. T-TAKE OFF W-WAR EMERG. M-MILITARY C-CONTINUOUS	SIZE S-SPAN L-LENGTH H-HEIGHT T-TREAD W-WING AREA	WEIGHT B-BASIC C-COMBAT W-WAR MAX. M-MAX. LAND.	* NOTES	COMBAT CREW	FUEL & OIL — FUEL TANKAGE: TYPE OR LOCATION (MAX. OIL) ALSO	NO. AND CAPACITY (MAX. FUEL) ALSO	ARMAMENT (NO. ROCKETS-SIZE-INSTALLATION): NO. GUNS AND SIZE	RDS. PER GUN	LOCATION AND TYPE	BOMBS NO. AND SIZE: INTERNAL	EXTERNAL	MAX. LOAD	RADIO: TYPICAL MODELS CARRIED (SEE A)	REMARKS & REFERENCE
A-20G-DO -5 thru -15	2	WRIGHT R-2600-23 2 SPD. SUPERCH. HAMILTON STD. 11'3"DIA.-3 BL. F.F., HYDROMATIC	T 1600/ S L W 1675/ S L W 1600/ 1000 M 1400/10000 C 1350/ 5000 C 1275/11500	S 61' 4" L 48' 0" H 17' 7" T 17' 0" W 465 Sq. Ft.	B 17200 C 24000 W 30000* M 24000	FLIGHT CHARACTERISTICS CRITICAL ABOVE 27000 LB.	3	INBD. - WINGS OUTBD. - WINGS FUS. (BOMB B.) DROP. - WINGS (46)	2 x 136 2 x 64 2 x 70 4 - 680 (1080)	1 .30 1 .50 or	500	TUNNEL - FLEX.	4-500 4-250 4-100	1-2000T (PARTIALLY EXTERNAL)	2000	SCR-274 SCR-522 SCR-535 SCR-595 SCR-695 HM-26 RC-32 RC-36 RC-198	A-20G & J TECH. ORDER 01-40-1 (REV. 5 MAR. 1945) A-20H & K TECH. ORDER 01-40AP-1 (REV. 30 OCT. 1945) (a) NO TORPEDO PROVISIONS ON -40 & -45 MODELS. T TORPEDO (REPLACES INTERNAL BOMBS WHEN CARRIED) x EXTERNAL ★ 12(5") AR OR HVAR INSTALLED ON SOME MODELS IN SERVICE.
A-20G-DO -20 thru -45	2	AS ABOVE	AS ABOVE	AS ABOVE	B 17700 C 26000 W 30000* M 24000		3	INBD. - WINGS OUTBD. - WINGS FUS. (BOMB B.) DROP. - WINGS (46)	2 x 136 2 x 64 3 - 325 1 x 374 (1099)	1 2 6 .50	400 400 350 ★	TUNNEL - FLEX. UPPER TURRET NOSE - FIXED	4-500 4-250 4-100	4- 500 4- 250 4- 100 x 1-2000T	4-500 4-500x 4000		
A-20J-DO -1 thru -20	2	AS ABOVE	AS ABOVE	S 61' 4" L 48' 7" H 17' 7" T 17' 0" W 465 Sq. Ft.	B 17800 C 26000 W 30000* M 24000		4	AS ABOVE		1 2 2 .50	400 400 350 ★	TUNNEL - FLEX. UPPER TURRET NOSE - FIXED	AS ABOVE EXCEPT NO TORPEDO PROVISIONS ON -15 & -20 MODELS.				
A-20H-DO -1 thru -15	2	WRIGHT R-2600-29 2 SPD. SUPERCH. HAMILTON STD. 11'3"DIA.-3 BL. F.F., HYDROMATIC	T 1700/ S L W 1850/ S L W (1700/ 5200 M 1450/13400 C 1500/ 6900 C 1350/65900	S 61' 4" L 48' 0" H 18' 1" T 17' 0" W 465 Sq. Ft.	AS ABOVE		3	AS ABOVE		1 2 6 .50	400 400 350 ★	TUNNEL - FLEX. UPPER TURRET NOSE - FIXED	4-500 4-250 4-100	4-500 4-250 4-100	4-500 4-500x 4000		
A-20K-DO -1 thru -15	2	AS ABOVE	AS ABOVE	AS ABOVE	AS ABOVE		4	AS ABOVE		1 2 2 .50	400 400 350 ★	TUNNEL - FLEX. UPPER TURRET NOSE - FIXED	AS ABOVE				
COLUMN 1	2	3	4	5	6 7		8	9	10	11	12	13	14	15	16	17	18

REFER TO PAGE 4 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): GROSS WEIGHT	TO CLEAR 50' T.O. DIST.	TO CLEAR 50' LAND DIST.	LANDING SPEED	GROUND RUN T.O. DIST.	GROUND RUN LAND DIST.	HIGH SPEED & CLIMB (CLEAN AIRPLANE AT NORMAL COMBAT WEIGHT): WEIGHT	STD. ALT.	WAR EMERG. HIGH SPEED	WAR EMERG. RATE OF CLIMB	MIL. POWER HIGH SPEED	MIL. POWER RATE OF CLIMB	MAX. CONTIN. POWER HIGH SPEED	MAX. CONTIN. POWER RATE OF CLIMB	MAX. CONTIN. POWER TIME TO CLIMB
	LB	FT	FT	M.P.H	FT	FT	LB	FT	M.P.H	FT/MIN	M.P.H	FT/MIN	M.P.H	FT/MIN	MIN
A-20G-DO -5 thru -15	19000 21000 24000 26000 27000	- 3900 4800 6500 7000	3300 3700 4000 - -	95 100 105 - -	- 3100 3900 5000 6000	2100 2300 2500 - -	24000	20000 15000 10000 5000 S L	NO DATA		305 317 315 305 300	420 875 1180 1500 1500	302 313 305 297 283	350 750 1000 1300 1300	18.5 12.8 7.1 3.2 0.0
A-20G-DO -20 thru -45	AS ABOVE						26000	20000[b] 15000[b] 10000 5000 S L	NO DATA		291 311 312 305 302	240 620 1000 1300 1300	280 298 295 290 276	- 500 850 1100 1100	- 16.5 8.8 3.5 0.0
A-20J-DO -1 thru -20	AS ABOVE							AS ABOVE			AS ABOVE				
A-20H-DO -1 thru -15	19000 21000 24000 26000 27000	- 2900 3500 4500 5000	3300 3700 4000 - -	94 100 108 - -	- 1900 2300 3000 3300	2100 2300 2600 - -	26000	20000[b] 15000[b] 10000 5000 S L	NO DATA		315 322 320 305 300	575 1100 1250 1700 1700	307 317 302 299 285	500 1000 1190 1500 1500	18.0 11.6 8.6 6 2.5 0.0
A-20K-DO -1 thru -15	AS ABOVE							AS ABOVE			AS ABOVE				

RANGE AND ENDURANCE — STATUTE AIR MILES-NO WIND- NO ALLOWANCE FOR RESERVE

MODEL & BLOCK NO.	LOADING: TAKE OFF WEIGHT LB	BOMBS ~~CARGO~~ ~~PASS~~ LB	TOTAL FUEL U.S. GAL	MAX. CONTINUOUS POWER at 10,000 FT. RANGE MILES	MAX. CONTINUOUS POWER at 10,000 FT. ENDUR. HOURS	MAX. CONTINUOUS POWER at 20,000 FT. RANGE MILES	MAX. CONTINUOUS POWER at 20,000 FT. ENDUR. HOURS	MAX. CRUISE POWER at 10,000 FT. RANGE MILES	MAX. CRUISE POWER at 10,000 FT. ENDUR. HOURS	MAX. CRUISE POWER at 20,000 FT. RANGE MILES	MAX. CRUISE POWER at 20,000 FT. ENDUR. HOURS	LONG RANGE at 10,000 FT. RANGE MILES	LONG RANGE at 10,000 FT. ENDUR. HOURS	REMARKS
A-20G-DO -5 thru -15	25300 24000 24000	NONE 2000 2000T	1080 540 540	925 425 350	3.1 1.5 1.4	1050 475 425	3.6 1.8 1.7	1450 625 575	5.7 2.5 2.3	1575 675 625	6.7 2.9 2.8	2025 875 776	10.5 4.2 4.0	(b) FLIGHTS ABOVE 10000 FT. REQUIRE SPECIAL OXYGEN PROVISIONS.
A-20G-DO -20 thru -45	26200 26000 26000 26000	NONE 2000 2000T 4000	1099 725 725 400	725 600 475 375	2.5 2.0 1.8 1.1	[b] 1000 625 575 250	[b] 3.6 2.4 2.5 1.3	1625 1025 950 475	6.7 4.3 4.3 2.2	[b] 1450 900 775 325	[b] 6.1 4.0 3.8 1.8	1925 1175 1050 550	9.4 5.7 5.5 2.7	A-20H & K FLIGHT TEST REQUESTED
A-20J-DO -1 thru -20	AS ABOVE													
A-20H-DO -1 thru -15	26400 26000 25100	NONE 2000 4000	1099 725 400	775 525 325	2.7 1.6 1.0	[b] 1025 575 250	[b] 3.6 2.1 1.0	1625 978 450	6.4 3.4 1.7	[b] 1650 925 375	[b] 6.3 3.6 1.5	1975 1225 525	8.7 5.2 2.3	
A-20K-DO -1 thru -15	AS ABOVE													

NOTES:

(A) FIVE OF MORE OF FOLLOWING:

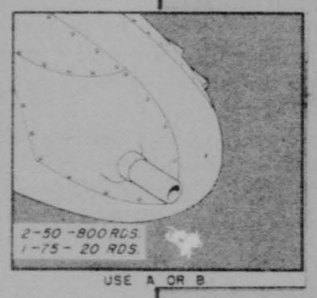
SCR-274	COMMAND SET
SCR-522	COMMAND SET
SCR-535	IFF
SCR-595	IFF
SCR-695	IFF
HM-26	RADIO COMPASS
RC-32	FILTER EQUIPMENT
RC-36	INTERPHONE AMP.
RC-198	FILTER EQUIPMENT

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

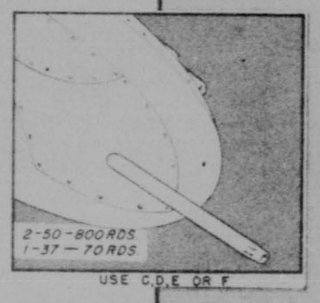
MANUFACTURED BY DOUGLAS (SANTA MONICA) "DO"

A-20 "HAVOC"

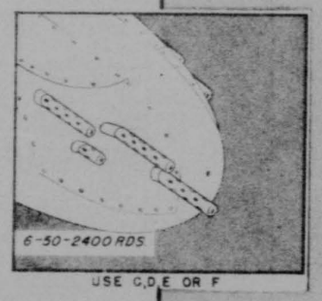
ALL PURPOSE NOSE AND BOMB BAY
(A-26 SERIES)



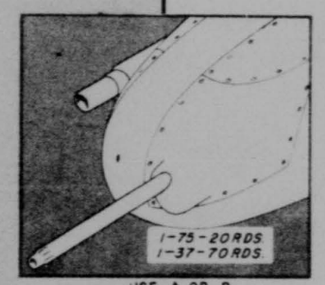
USE A OR B



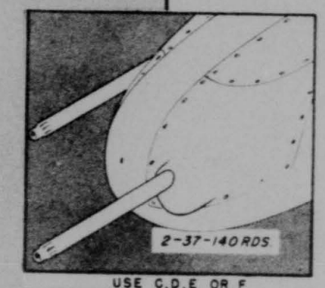
USE C,D,E OR F



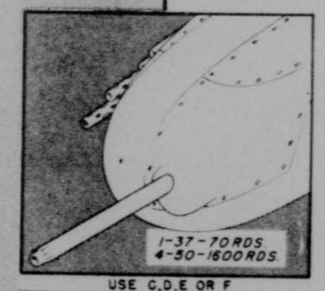
USE C,D,E OR F



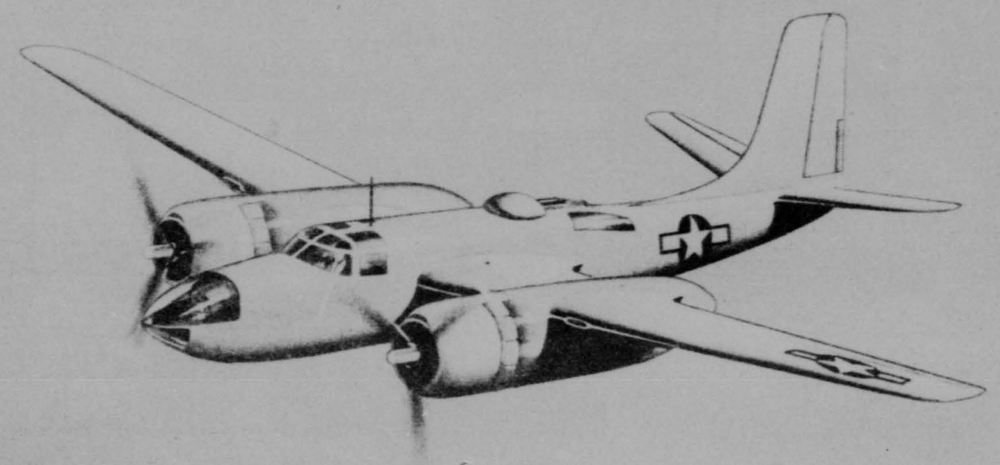
USE A OR B



USE C,D,E OR F



USE C,D,E OR F



A-26 C

A	B	C	D	E	F
125 GAL. (S.S.)	125 GAL. (S.S.)	125 GAL. (S.S.)	125 GAL. (S.S.)	125 GAL. (S.S.)	125 GAL. (S.S.)
INTERNAL BOMB LOAD: 3x1000 5x 500 6x 250 9x 100	INTERNAL BOMB LOAD: 3x1000 5x 500 6x 250 11x 100	INTERNAL BOMB LOAD: 4x1000 6x 500 8x 250 12x 100	INTERNAL BOMB LOAD: 4x1000 6x 500 8x 250 16x 100	INTERNAL BOMB LOAD: 11 2x 23 (Frag.)	INTERNAL BOMB LOAD: 2x2000 (Torpedoes)
75mm. shell case bag	75mm. shell case bag				

S.S.-Self Sealing

TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART

AS OF 29 JUNE 1945

MODEL & BLOCK NO.	ENGINE & PROP. NUMBER	ENGINE MFGR. MODEL SUPERCHARGER PROP. MFGR. TYPE	B.H.P./ALT. T- TAKE OFF W- WAR EMERG. M- MILITARY C- CONTINUOUS	SIZE S-SPAN L-LENGTH H-HEIGHT T-TREAD W-WING AREA	WEIGHT B-BASIC C-COMBAT W-WAR MAX. M-MAX. LAND.	* NOTES	COMBAT CREW	FUEL & OIL: FUEL TANKAGE TYPE OR LOCATION (MAX. OIL)	FUEL & OIL: FUEL TANKAGE NO. AND CAPACITY (MAX. FUEL)	ARMAMENT (NO. ROCKETS-SIZE-INSTALLATION) NO. GUNS AND SIZE	ARMAMENT RDS. PER GUN	ARMAMENT LOCATION AND TYPE	BOMBS NO. AND SIZE INTERNAL	BOMBS NO. AND SIZE EXTERNAL	BOMBS MAX. LOAD	RADIO TYPICAL MODELS CARRIED (SEE A)	REMARKS & REFERENCE
A-26B-DL -1 & -5 A-26B-DT -1 & -5	2	PRATT-WHITNEY R-2800-27 SINGLE STG.-2 SPEED HAMILTON STD. 12'7"DIA.-3 BL. F.F., HYDROMATIC	T- 2000/ S L W- 2340/ S L M- 2000/ 1500 C- 1600/13500 1600/ 6500 1450/14000	S 70' L 50' H 18' 6" T 19' 6" W 540 Sq. Ft.	B 23275 C 35000 W 42300* M 31000		2 or 3	MAIN - WINGS AUX. - WINGS BOMB BAY (S. S.) B. BAY (FERRY) (68)	2 x 300 2 x 100 1 x 125 1 x 675 (1600)	1-75mm 2-.50 2-.50 4 or 8 .50 [a]	20 500 500 300	*NOSE - TIDEI UPPER TURRET LOWER TURRET [a]WINGS - PACKAGE	★ 4-1000 6-500 8-250 16-100	2-2000 T 4-500 4-250 4-100	4-1000 4-500x ★ 6000	SCR-269 SCR-274 SCR-522 SCR-595 SCR-695 MN-26 RC-32 RC-36 RC-193 RC-198 AN/AIC-2 AN/APN-4 or 9 AN/APQ-9 AN/ARC-3 AN/ARN-7 AN/ARC-8 AN/ASA-3 RCM GEE	REFER TO PAGE 4 FOR "FOREWORD." REFER TO PAGE 3 FOR SECURITY CLASSIFICATION. REFER TO PAGE 5 FOR DEFINITIONS. REFER TO T.O. LISTED FOR DETAILED PLANNING. 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) R-2800-79 WATER INJECTION ENGINE INSTALLED ON A-26B-45-DL THRU -55 AND A-26C-45-DT AND SUBSEQUENT MODELS: WAR EMERGENCY AND MILITARY RATINGS SHOWN WITH WATER INJECTION: WATER CAPACITY 23 GAL. PER TANK. (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. (e) A-26C-55-DT & SUBSEQUENT MODELS HAVE 6-.50 CAL. INTERNAL WING GUNS INSTALLED IN LIEU OF 8 WING PACKAGE GUNS CARRIED ON -15 THRU -50 MODELS. (f) A-26B-65-DL & SUBSEQUENT MODELS HAVE 8-.50 CAL. NOSE GUNS (350 RDS. EA.) INSTALLED IN LIEU OF 6 NOSE GUNS NOW LISTED (g) A-26B-5-DL AIRPLANE SIMILAR TO A-26B-60 MODEL EXCEPT FOR CHANGE TO "C" SERIES ENGINES AND INSTALLATION OF DROPPABLE WING PACKAGE GUNS. (h) ROCKETS INSTALLED ON A-26C-45 & SUBSEQUENT MODELS. ★ SEE PAGE OPPOSITE FOR ALL - PURPOSE NOSE INSTALLATIONS AND ALTERNATE BOMB LOADINGS. T TORPEDO x EXTERNAL
A-26B-DL -10 thru -45 [b] A-26B-DT -10 thru -25	2	PRATT-WHITNEY R-2800-27 or -71 SINGLE STG.-2 SPEED HAMILTON STD. 12'7"DIA.-3 BL. F.F., HYDROMATIC	AS ABOVE	S 70' L 50' 7" H 18' 6" T 19' 6" W 540 Sq. Ft.	B 23325 C 35000 W 42300* M 31000		2	AS ABOVE		6 2 .50 2 4 or 8 .50 [a]	400 500 500 300	*NOSE UPPER TURRET LOWER TURRET [a]WINGS	AS ABOVE			
A-26B-DL -50 thru -65 A-26D-5-DL (See g)	2	PRATT-WHITNEY R-2800-27, -71, -79 [b] SINGLE STG.-2 SPEED HAMILTON STD. 12'7"DIA.-3 BL. F.F., HYDROMATIC	AS ABOVE EXCEPT R-2800-79 IS RATED AS SHOWN BELOW	AS ABOVE	B 23300 C 35000 W 42300* M 31000	TIRES & BRAKES CRITICAL ABOVE 35000 LB. STRUCTURAL LIMITATIONS - 42300 LB.	2	AS ABOVE		14(5") ZERO LENGTH RAIL ROCKETS 6 6 .50 2 2	400 300 500 500	*NOSE WINGS UPPER TURRET LOWER TURRET	AS ABOVE			
A-26C-DT -15 thru -60 [b]	AS ABOVE		AS ABOVE	S 70' L 51' 3" H 18' 6" T 19' 6" W 540 Sq. Ft.	B 23750 C 35000 W 42300* M 31000		2	AS ABOVE EXCEPT A-26C-45 & SUBSQT. HAVE 2 x 155 GAL. EXTERNAL WING TANKS ADDED GIVING TOTAL OF 1910 GAL.		[b] 14(5") ZERO LENGTH RAIL ROCKETS 2 2 .50 2 6 [c]	400 500 500 300	NOSE UPPER TURRET LOWER TURRET [c]WINGS	4-1000 6-500 8-250 16-100	2-2000 T 4-500 4-250 4-100	4-1000 4-500x 6000		
A-26B *CURRENT MODELS*	2	PRATT-WHITNEY R-2800-79 [b] SINGLE STG.-2 SPEED HAMILTON STD. 12'7"DIA.-3 BL. F.F., HYDROMATIC	T- 2000/ S L W- 2360/ S L [b] M- (2100/ 1500 [b] (1540/14500 [b] C- (1600/ 6500 (1450/14000	SAME AS FOR A-26B & C LISTED ABOVE	B 23200 C SEE c W 42300* M 31000		2	MAIN - WINGS AUX. - WINGS BOMB BAY (S. S.) B. BAY (FERRY) EXTERNAL-WINGS LOWER FUSEL. [d] (68)	2 x 300 2 x 100 1 x 125 1 x 675 2 x 155 1 x 125 [d] (2035) [d]	14(5") ZERO LENGTH RAIL ROCKETS 8 6 .50 2 2	350 300 900 500	NOSE WINGS UPPER TURRET [c]LOWER TURRET	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: GROSS WEIGHT LB.	TO CLEAR 50': T.O. DIST. FT.	LAND DIST. FT.	LANDING SPEED M.P.H.	GROUND RUN: T.O. DIST. FT.	LAND DIST. FT.	HIGH SPEED & CLIMB CLEAN AIRPLANE AT NORMAL COMBAT WEIGHT: WEIGHT LB.	STD. ALT. FT.	WAR EMERG.: HIGH SPEED M.P.H.	RATE OF CLIMB FT. MIN.	MIL. POWER: HIGH SPEED M.P.H.	RATE OF CLIMB FT. MIN.	MAX. CONTIN. POWER: HIGH SPEED M.P.H.	RATE OF CLIMB FT. MIN.	TIME TO CLIMB MIN.	RANGE AND ENDURANCE STATUTE AIR MILES - NO WIND - NO ALLOWANCE FOR RESERVE: LOADING TAKE OFF WEIGHT LB.	BOMBS CARGO PASS. LB.	TOTAL FUEL U.S. GAL.	MAX. CONTINUOUS POWER at 10000 FT. RANGE MILES	ENDUR. HOURS	at 20000 FT. RANGE MILES	ENDUR. HOURS	MAX. CRUISE POWER at 10,000 FT. RANGE MILES	ENDUR. HOURS	at 20000 FT. RANGE MILES	ENDUR. HOURS	LONG RANGE at 10,000 FT. RANGE MILES	ENDUR. HOURS	REMARKS
A-26 SERIES	25000	-	3500	86	-	1900	35000	20000*			337 [f]	350 [f]	329	300	23.4	35000	NONE	1600	1200	3.7	1650 [e]	5.1 [e]	2300	7.9	2300 [e]	8.0 [e]	2900	14.7	(e) SPECIAL PROVISIONS FOR OXYGEN REQUIRED. (f) HIGH SPEED DECREASES APPROX. 13 M.P.H. & RATE OF CLIMB 150 FT. PER MINUTE WHEN 8 EXTERNAL PACKAGE GUNS ARE CARRIED.
	30000	4200	4100	105	2900	2300		15000*			355	820	341	780	13.4	31400	NONE	925	675	2.1	925	2.8	1425	5.2	1300	4.5	1675	7.9	
	32000	5600	-	-	3500	-		10000	NO DATA		346	1150	330	1050	8.1	34400	3000	925	650	2.1	875	2.8	1400	5.3	1225	4.3	1575	7.0	
	34000	6700	-	-	4200	-		5000			350	1540	320	1270	3.7	34600	4000	800	550	1.7	750	2.4	1175	4.5	1000	3.6	1300	5.8	
	35000	7200	-	-	4500	-		S L			328	2030	297	1940	0.0														
																													FLIGHT TEST IN PROGRESS
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

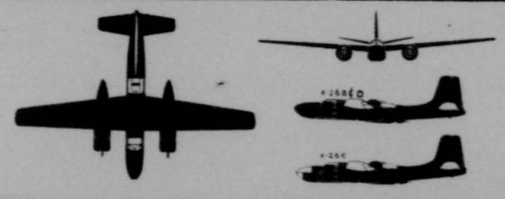
NOTES: FIVE OR MORE OF FOLLOWING:

(A)

SCR-269	RADIO COMPASS	AN/AIC-2	INTERPHONE
SCR-274	COMMAND SET	AN/APN-4 or 9	LORAN
SCR-522	COMMAND SET	AN/ARC-3	COMMAND (VHF)
SCR-595	IFF	AN/ARN-7	RADIO COMPASS
SCR-695	IFF	AN/ARC-8	LIAISON SET
MN-26	RADIO COMPASS	AN/ASA-3	STATIC DISCHARGE
RC-32	FILTER EQUIPMENT	RCM	RADIO COUNTER MEASURE
RC-36	INTERPHONE AMP.	GEE	BRITISH LORAN
RC-193	MARKER BEACON	AN/APQ-9	JAMMING TRANSMITTER
RC-198	FILTER EQUIPMENT		

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

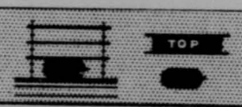
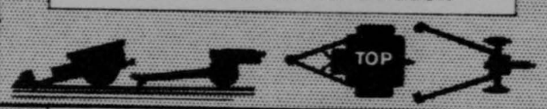
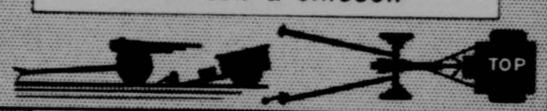
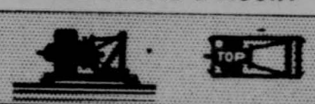
MANUFACTURED BY DOUGLAS (LONG BEACH) "DL" & (TULSA) "DT"



A-26

"INVADER"

LOADING THE CURTISS "COMMANDO"

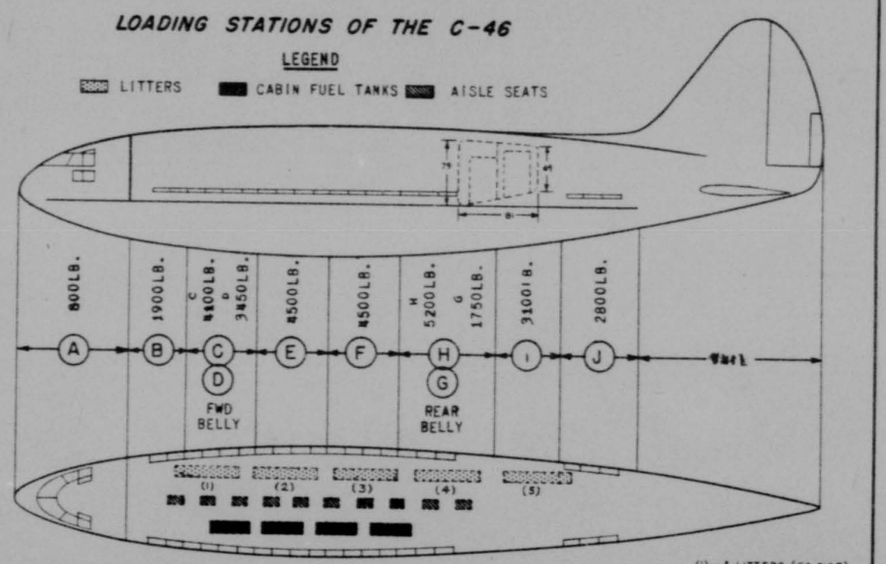
ITEM	WEIGHT	STATION
JEEP 	3100 LB.	(C) THRU (H)
105 MM GUN & CAISSON 	GUN 4300LB. CAISSON 4700LB.	(E) THRU (H)
LITTERS 	3 TIER LITTER 50LB. OXYGEN BOTTLE 138LB.	REAR - (B) THRU FORE - (J)
75 MM HOWITZER & CAISSON 	HOWITZER 2100LB. CAISSON 5000LB.	(C) THRU (H)
37 MM GUN & MOTOR CHASSIS 	5500LB.	(C) THRU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

LEGEND: LITTERS · CABIN FUEL TANKS · AISLE SEATS



(1)—3 LITTERS (EA. SIDE)
(2)—4 LITTERS (EA. SIDE)
(3)—4 LITTERS (EA. SIDE)
(4)—4 LITTERS (EA. SIDE)
(5)—3 LITTERS (R. SIDE ONLY)

C-46D ONLY, HAS DOUBLE PARATROOP DOOR)

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).

TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART

PAGE 25
AS OF 29 JUNE 1945

MODEL & BLOCK NO.	ENGINE & PROP. NUMBER	ENGINE MFGR. MODEL SUPERCHARGER PROP. MFGR. TYPE	B.H.P./ALT. T-TAKE OFF W-WAR EMERG. M-MILITARY C-CONTINUOUS	SIZE S-SPAN L-LENGTH H-HEIGHT T-TREAD W-WING AREA	WEIGHT B-BASIC C-COMBAT W-WAR MAX. M-MAX LAND.	WEIGHT * NOTES	COMBAT CREW	FUEL & OIL FUEL TANKAGE TYPE OR LOCATION ALSO (MAX. OIL)	FUEL & OIL FUEL TANKAGE NO. AND CAPACITY ALSO (MAX. FUEL)	CARGO OR PASSENGERS STATION	CAPACITY	MAX. LOAD LB	STATION	PLACES	MAX. LOAD LB	RADIO TYPICAL MODELS CARRIED SEE (A)	REMARKS & REFERENCE
C-46A-5 thru -55 (CU) C-46A-1,-5,-55,-60 (CK) C-46A-1 (CS) C-46D-1 thru -20 (CU)	2	PRATT-WHITNEY R-2800-51 or -75 2 SPEED-SINGLE STG. CURTISS 13'6"DIA.-4 BL. F.F., ELECTRIC	T 2000/ S L W NONE M {2000/ 1500 {1600/ 13500 C {1600/ 5700 {1450/ 13000	S 108' 0" L 76' 4" H 22' 0" T 25' 0" W 1360 Sq. '	B 31500 C 46000 W 56000* M 49600	PERMISSIBLE ONLY WITH ALL WING TANKS FULL.	4	WING - FORE WING-CENTER WING - REAR FUSEL.-REMOVE (80 + 40)	2 x 244 2 x 286 2 x 171 8 x 100 (2202)	CABIN (MAIN) BELLY (FORE) BELLY (AFT)	10000 3700 1800	15000	TROOPS [a] or LITTERS ATTENDANTS	50 or 33 4	12000 or 9000	SCR-211, 259, 274N, 287, 518, 522, 578, 695. RC-36, 43, 103, 198. HN-26 AN/AIC-2, 3 AN/ARA-10 AN/ARC-8, 9. AN/APN-4, 7, 11 AN/ARR-1 AN/ASA-1 AN/APN-1, 2, 4	C-46A & D TECH. ORDER 01-25LA-1 (25 MAY 1945) C-46E TECH. ORDER 01-25LB-1 (10 JUNE 1945) (a) LATER C-46D's HAVE EXTRA PARATROOP DOOR.
C-46E-CS C-46F-CU -1	2	PRATT-WHITNEY R-2800-75 2 SPEED-SINGLE STG. HAMILTON STD. 15'1"DIA.-3 BL. F.F., HYDROMATIC	AS ABOVE	AS ABOVE	B 31700 C 46000 W 56000* M 49600		4	AS ABOVE		AS ABOVE			AS ABOVE				
			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												
			T W M C	S L H T W	B C W M												
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: GROSS WEIGHT LB	TO CLEAR 50' T.O. DIST. FT	TO CLEAR 50' LAND DIST. FT	LANDING SPEED M.P.H.	GROUND RUN T.O. DIST. FT.	GROUND RUN LAND DIST. FT.	HIGH SPEED & CLIMB CLEAN AIRPLANE AT NORMAL COMBAT WEIGHT: WEIGHT LB	STD. ALT. FT	WAR EMERG. HIGH SPEED M.P.H.	WAR EMERG. RATE OF CLIMB FT. MIN.	MIL. POWER HIGH SPEED M.P.H.	MIL. POWER RATE OF CLIMB FT. MIN.	MAX. CONTIN. POWER HIGH SPEED M.P.H.	MAX. CONTIN. POWER RATE OF CLIMB FT. MIN.	MAX. CONTIN. POWER TIME TO CLIMB MIN.	RANGE AND ENDURANCE STATUTE AIR MILES-NO WIND-NO ALLOWANCE FOR RESERVE: LOADING TAKE OFF WEIGHT LB	LOADING BOMBS CARGO PASS. LB	LOADING TOTAL FUEL U.S. GAL	MAX. CONTIN. at 10000 FT. RANGE MILES	MAX. CONTIN. at 10000 FT. ENDUR. HOURS	LONG RANGE CRUISE at 5,000 FT. RANGE MILES	LONG RANGE CRUISE at 5,000 FT. ENDUR. HOURS	at 10,000 FT. RANGE MILES	at 10,000 FT. ENDUR. HOURS	at 15,000 FT. RANGE MILES	at 15,000 FT. ENDUR. HOURS	at 20,000 FT. RANGE MILES	at 20,000 FT. ENDUR. HOURS	REMARKS
C-46A-5 thru -55 (CU) C-46A-1,-5,-55,-60 (CK) C-46A-1 (CS) C-46D-1 thru -20 (CU)	34000 38000 40000 45000 50000	- 2100 2300 2900 3500	2300 2500 2500 2800 -	82 88 96 96 -	- 1500 1600 2100 2600	1100 1400 1500 1500 -	45000	20000 15000 10000 5000 S L	NONE		260 269 254 252 245	- 675 800 1000 1200	241 249 241 233 221	275 500 625 825 800	35.7 22.1 13.6 6.4 0.0	50000 46000 45000 50000	2000 4000 6000 10000	2202 1402 1060 1060	1425 900 650 625	6.0 3.8 2.7 2.7	2850 1800 1250 1225	16.5 10.3 6.7 7.0	2750 1750 1200 1150	14.7 9.3 7.3 5.2	2700 1700 1200 1000	13.9 10.2 7.3 5.3	2350 [b] 1500 1030 950 [b]	13.1 [b] 9.0 6.3 5.6 [b]	(b) FIRST 4 HRS. OF FLIGHT AT 15000 FT. ALTITUDE. (c) FIRST 3 HRS. OF FLIGHT AT 15000 FT. ALTITUDE.
C-46E-CS C-46F-CU -1	AS ABOVE						45000	20000 15000 10000 5000 S L	NONE		275 278 270 275 253	275 550 725 1025 1150	254 257 248 241 223	225 500 650 900 875	35.1 20.8 12.4 5.8 0.0	50000 45000 46000 50000	1800 3800 5800 9800	2202 1402 1060 1060	1375 850 650 625	5.8 3.6 2.7 2.7	2900 1850 1350 1250	17.9 11.8 8.4 7.7	2875 1850 1350 1200	17.0 11.0 7.9 7.0	2800 1825 1200 1150	16.0 10.3 7.3 6.5	2500 [c] 1650 1150 1000 [c]	13.5 [c] 9.0 6.3 5.9 [c]	
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) TWELVE OR MORE OF FOLLOWING:

EARLY TYPES	NAME	LATER TYPES
SCR-211	FREQUENCY METER	-
SCR-269, 48-76	COMPASS	AN/ARN-7 & 33
SCR-274N, 522	COMMAND SET	
SCR-287	LIAISON SET	AN/ARC-8
SCR-518	HIGH ALTITUDE ALTIMETER	-
SCR-578	EMERGENCY TRANSMITTER	-
SCR-695	"GCA"	AN/ARC-9
RC-36	INTERPHONE	AN/AIC-2 & 3
RC-43	MARKER BEACON	-
RC-103	LOCALIZER	-
RC-198	FIXED SWITCH	-
-	LOW ALTITUDE ALTIMETER	AN/APN-1
-	REBECCA (BEACON RECEIVER)	AN/APN-7
-	LORAN	AN/APN-4
-	PANEL CONTROL SYSTEM	AN/ASA-10
-	GLIDE PATH	AN/ARN-5
-	HOMING ADAPTER	AN/ARR-1
-	STATIC DISCHARGE	AN/ASA-1

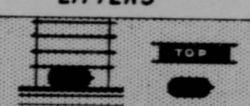
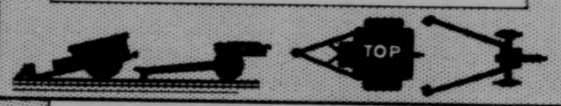
RED FIGURES ARE PRELIMINARY: SUBJECT TO REVISION AFTER FLIGHT CHECK.

[redacted]

MANUFACTURED BY CURTISS (BUFFALO) "CU": (ST. LOUIS) "CS" & (LOUISVILLE) "CK"

C-46A "COMMANDO"

LOADING THE DOUGLAS "SKYTRAIN"

ITEM	WEIGHT	STATION
JEEP 	3100 LB.	(D) OR (E)
LITTERS 	4 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)

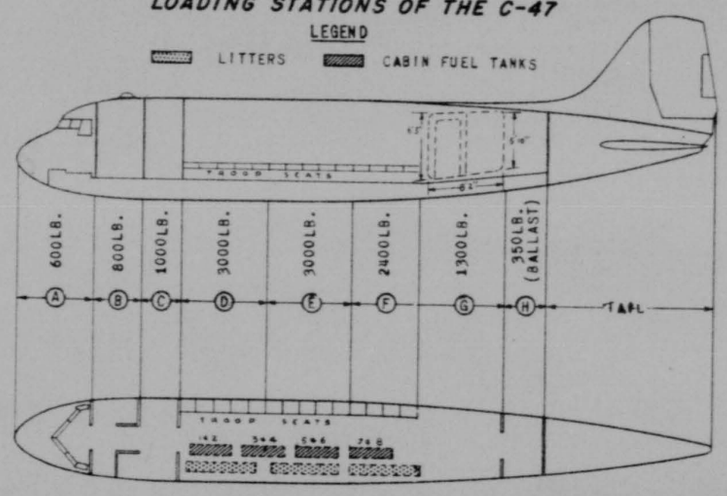
WEIGHT LEGEND

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

LOADING STATIONS OF THE C-47

LEGEND

LITTERS CABIN FUEL TANKS



(3) 4 TIER LITTERS EA. SIDE
RH-14, LH-13 } TROOPS

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

TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART

AS OF 29 JUNE 1945

MODEL & BLOCK NO.	ENGINE & PROP. NUMBER	ENGINE & PROP. ENGINE MFGR. MODEL SUPERCHARGER PROP. MFGR. TYPE	ENGINE & PROP. B.H.P./ALT. T- TAKE OFF W- WAR EMERG. M- MILITARY C- CONTINUOUS	SIZE S-SPAN L-LENGTH H-HEIGHT T-TREAD W-WING AREA	WEIGHT B-BASIC C-COMBAT W-WAR MAX. M-MAX.LAND.	WEIGHT * NOTES	COMBAT CREW	FUEL & OIL FUEL TANKAGE TYPE OR LOCATION ALSO (MAX. OIL.)	FUEL & OIL FUEL TANKAGE NO. AND CAPACITY ALSO (MAX.FUEL)	CARGO OR PASSENGERS STATION	CAPACITY	MAX. LOAD LB.	STATION	PLACES	MAX. LOAD LB.	RADIO TYPICAL MODELS CARRIED SEE (A)	REMARKS & REFERENCE
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"DIA.-3 BL. F.F., HYDROMATIC	T 1200/ S L W NONE M 1200/ 5000 C 1050/ 7500	S 95' 6" L 63' 9" H 17' 0" T 18' 6" W 987 Sq. Ft.	B 18200 C 29000 W 36500* M 29300	PERMISSIBLE ONLY WITH ALL WING TANKS FULL.	4	MAIN-WINGS AUX.-WINGS FUSEL. (REMOVE) (58)	2 x 202 2 x 200 [a]9 x 100 (1704)	CABIN-MAIN	10000	10000	TROOPS or LITTERS ATTENDANTS	27 [e] or 24 [f] 2	6500 or 6400	SCR-187,211, 269, 274, 287, 522, 578, 595 & 695. RC-36, 43, 103, 193 & 198. AN/APN-1, 2 AN/ARN-5, 7 AN/ARR-1 AN/ASA-1, 3 AN/APN-9 RC-32 AN/AIA-1 SCR-717 GEE	C-47A & B TECH. ORDER 01-40NC-1. (REV. 5 JAN. 1945) (a) LATEST MODELS CARRY 9 TANKS: EARLIER MODELS - 6 TANKS. (e) C-53's CARRY 28 TROOPS & HAVE SMALL CARGO DOOR. (f) LATEST MODELS INSTALLED WITH 24 LITTERS: EARLIER MODELS - 18 LITTERS.
C-47B-DK -1 thru -35 C-47B-DL -1	2	PRATT-WHITNEY R-1830-90C 2 STAGE - 2 SPD. HAMILTON STD. 11'7"DIA.-3 BL. F.F., HYDROMATIC	T 1200/ S L W NONE M {1200/ 5000 1050/ 11000 C {1100/ 6000 1000/ 13000	AS ABOVE	AS ABOVE		4	AS ABOVE		AS ABOVE							
			T W M C														
			T W M C														
			T W M C														
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 GROSS WEIGHT LB	TO CLEAR 50' T.O. DIST. FT	TO CLEAR 50' LAND DIST. FT	LANDING SPEED M.P.H.	GROUND RUN T.O. DIST. FT	GROUND RUN LAND DIST. FT	HIGH SPEED & CLIMB CLEAN AIRPLANE AT NORMAL COMBAT WEIGHT WEIGHT LB	STD. ALT. FT	WAR EMERG. HIGH SPEED M.P.H.	WAR EMERG. RATE OF CLIMB FT/MIN	MIL. POWER HIGH SPEED M.P.H.	MIL. POWER RATE OF CLIMB FT/MIN	MAX. CONTIN. POWER HIGH SPEED M.P.H.	MAX. CONTIN. POWER RATE OF CLIMB FT/MIN	MAX. CONTIN. POWER TIME TO CLIMB MIN.	RANGE AND ENDURANCE STATUTE AIR MILES - NO WIND - NO ALLOWANCE FOR RESERVE LOADING TAKE OFF WEIGHT LB	LOADING ~~BOMBS~~ CARGO ~~PASS.~~ LB	LOADING TOTAL FUEL U.S. GAL	MAX. CONTIN. at 10000 FT. RANGE MILES	MAX. CONTIN. at 10000 FT. ENDUR. HOURS	LONG RANGE CRUISE at 5000 FT. RANGE MILES	LONG RANGE CRUISE at 5000 FT. ENDUR. HOURS	LONG RANGE CRUISE at 10,000 FT. RANGE MILES	LONG RANGE CRUISE at 10,000 FT. ENDUR. HOURS	LONG RANGE CRUISE at 15000 FT. RANGE MILES	LONG RANGE CRUISE at 15000 FT. ENDUR. HOURS	LONG RANGE CRUISE at 20,000 FT. RANGE MILES	LONG RANGE CRUISE at 20,000 FT. ENDUR. HOURS	REMARKS
C-47A thru -90 (DL) C-47A thru -30 (DK) C-53C & D (DL)	20000 24000 26000 29000 31000	- 2000 2400 3200 3700	2000 2400 2700 - -	70 74 76 - -	- 1300 1600 2000 2300	1200 1500 1600 - -	26000	20000 15000 10000 5000 S L	NONE		NO DATA		201 217 224 219 203	390 680 990 1110 925	24.2 15.0 9.2 4.4 0.0	29300 26000 29300 31000	NONE 300 5000 6700	1604 1004 804 804	2075 [b] 1400 [b] 975 [b] 925 [b]	10.0 [b] 8.8 [b] 4.9 [b] 4.8 [b]	3500 2200 1600 1450	22.5 14.3 9.9 9.1	3425 2200 1525 1450	20.5 12.4 9.0 8.6	3625 2250 1625 1625	20.5 12.7 9.2 8.0	3380 2225 1325 +200 [c]	19.0 12.6 7.5 6.9 [c]	(b) RANGE AND ENDURANCE BASED ON REDUCED POWER SETTINGS DUE TO SPEED LIMITATIONS. (c) FIRST 3.5 HRS. OF FLIGHT INCLUDING CLIMB, ARE AT 15000 FT. ALT. (d) FIRST 5.5 HRS. OF FLIGHT INCLUDING CLIMB, ARE AT 15000 FT. ALT.
C-47B-DK -1 thru -35 C-47B-DL -1	20000 24000 26000 29000 31000	- 2100 2400 3300 3800	2300 2500 2800 - -	70 74 76 - -	- 1200 1500 2000 2300	1300 1500 1700 - -	26000	25000 20000 15000 10000 5000 S L	NONE		NO DATA		- 223 229 224 219 203	200 460 730 940 1080 1170	40.7 24.1 15.4 9.5 4.4 0.0	29300 29000 25000 29300 31000	NONE 2500 1700 5000 6700	1804 1204 804 804 804	1300 [b] 1000 [b] 575 575 [b] 575 [b]	6.2 [b] 4.8 [b] 2.8 3.3 [b] 3.5 [b]	3050 2225 1500 1425 1350	19.4 14.5 9.5 9.4 9.3	3000 2175 1450 1375 1200	18.4 13.8 8.7 9.1 7.6	2825 2000 1400 1225 1300	16.5 11.9 8.4 7.5 6.0	2650 [d] 1800 [d] 1200 1125 [d] IMPRACTICAL	15.5 [d] 10.8 [d] 7.1 7.0 [d]	
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:

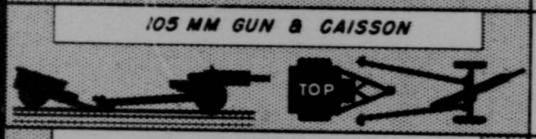
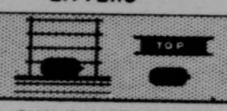
(A)

SCR-187	LIAISON SET	RC-103	LOCALIZER
SCR-211	FREQUENCY METER	RC-193	MARKER BEACON
SCR-269	RADIO COMPASS	RC-198	FILTER EQUIPMENT
SCR-274	COMMAND SET	AN/APN-1	LOW ALTITUDE ALTIMETER
SCR-287	LIAISON SET	AN/APN-2	"REBECCA" (BEACON RECEIVER)
SCR-522	COMMAND SET	AN/ARN-5	GLIDE PATH
SCR-578	EMERGENCY TRANSMITTER	AN/ARN-7	RADIO
SCR-595	IFF	AN/ARR-1	HOMING ADAPTER
SCR-695	IFF	AN/ASA-1 } AN/ASA-3 }	STATIC DISCHARGE
RC-36	INTERPHONE	AN/AIA-1	
RC-43	MARKER BEACON	AN/APN-9	LORAN
RC-32, SCR-717	FILTER EQUIPMENT	GEE	LORAN (BRITISH)

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

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

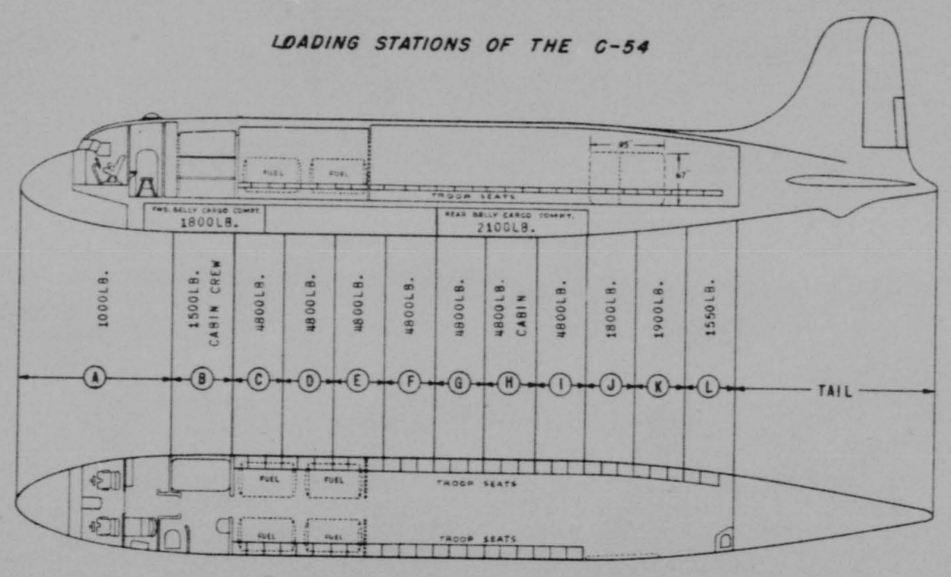
LOADING THE DOUGLAS "SKYMASTER"

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

WEIGHT LEGEND

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

LOADING STATIONS OF THE C-54



WITHOUT FUSELAGE TANKS-36 LITTERS { 5 TIERS RH / 4 TIERS LH }
WITH FUSELAGE TANKS — 28 LITTERS { 4 TIERS RH / 3 TIERS LH }

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

TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART

AS OF 29 JUNE 1945

MODEL & BLOCK NO.	ENGINE & PROP. NUMBER	ENGINE MFGR. MODEL SUPERCHARGER PROP. MFGR. TYPE	B.H.P./ALT. T- TAKE OFF W- WAR EMERG. M- MILITARY C- CONTINUOUS	SIZE S-SPAN L-LENGTH H-HEIGHT T-TREAD W-WING AREA	WEIGHT B-BASIC C-COMBAT W-WAR MAX. M-MAX.LAND	NOTES *	COMBAT CREW	FUEL & OIL FUEL TANKAGE TYPE OR LOCATION ALSO (MAX. OIL.)	NO. AND CAPACITY ALSO (MAX.FUEL)	CARGO OR PASSENGERS STATION	CAPACITY	MAX. LOAD LB.	STATION	PLACES	MAX. LOAD LB.	RADIO TYPICAL MODELS CARRIED SEE (A)	REMARKS & REFERENCE
C-54A-DO -1 & -5 C-54A-DC -1 thru -15	4	PRATT-WHITNEY R-2000-7 2 SPEED HAMILTON STD. 13'1"DIA.-3 BL. F.F., HYDROMATIC	T 1350/ S L W NONE M 1350/ 2000 1100/ 9000 C 1000/14000	S 117' 6" L 93'10" H 27' 6" T 24' 8" W 1460 Sq. '	B 37000 C 73000 W 87000* M 73000	PERMISSIBLE ONLY WITH ALL MAIN WING TANKS FULL.	6	INBD.-WINGS 2 x 490 OUTBD.-WINGS 2 x 420 FUSEL. (REMOVE) 4 x 450 (138) (3620)		CABIN-MAIN 27100 BELLY-FORE 1800 BELLY-AFT 2100 BAGGAGE 1500	32500	TROOPS [a] or LITTERS [a] ATTENDANTS	50 [a] or 36 [a] 4	12000 or 9800	SCR-211 SCR-269 SCR-274 SCR-287 SCR-515 SCR-522 SCR-578 SCR-595 SCR-695 SCR-718 RC-32 RC-36 RC-43 RC-103 RC-198 MN-26 AN/AIC-3 AN/APN-4 AN/APN-9 AN/ARA-10 AN/ARC-3 AN/ARC-8 AN/ARC-9 AN/APN-5 AN/ARN-7 AN/ARN-11 AN/ASA-1 AN/ASA-3 BC-1033	C-54A TECH. ORDER 01-40NH-1 (REV. 15 MAR. 1945) C-54B,D&E TECH. ORDER 01-40NS-1 (REV. 10 JAN. 1945) C-54G TECH. ORDER 01-40NU-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 28 LITTERS WITH FUSELAGE TANKS.
C-54B-DO -1 thru -20 C-54B-DC -1	4	AS ABOVE	T W M C	AS ABOVE	B 39400 C 73000 W 87000* M 73000		6	INBD.-WINGS 2 x 490 OUTBD.-WINGS 2 x 510 AUX. - WINGS 2 x 420 FUSEL. (REMOVE) 2 x 450 (138) (3740)		AS ABOVE			TROOPS [b] or LITTERS [b] ATTENDANTS	49 [b] or 36 [b] 4	11760 or 9500		
C-54E-DO -1 thru -15 C-54D-DC -1 thru -15	4	PRATT-WHITNEY R-2000-11 2 SPEED HAMILTON STD. 13'1"DIA.-3 BL. F.F., HYDROMATIC	T 1350/ S L W NONE M 1350/ 1000 1100/15000 C 1100/ 7500 1000/17000	AS ABOVE	B 39800 C 73000 W 87000* M 73000		6	OUTBD.-WINGS 2 x 500 OUTBD.-WINGS 2 x 420 INBD.W(AUX.) 2 x 490 INBD.W. (AUX.) 2 x 350 (138) (3520)		(C-54G SAME AS C-54B SHOWN ABOVE) WITH REMOVAL OF CABIN SEATS CARGO LOADING SAME AS FOR C-54A.			PERSONNEL	44	8800		
C-54G-(DO&DC) -1 C-54J-DO -1	4	PRATT-WHITNEY R-2000-9 2 SPEED HAMILTON STD. 13'1"DIA.-3 BL. F.F., HYDROMATIC	T 1450/ S L W NONE M 1450/ 1000 1100/16000 C 1100/ 7500 1000/17000	AS ABOVE	B 40000 C 73000 W 87000* M 73000		5	AS ABOVE		C-54G - WITH REMOVAL OF CANVAS TROOP BENCHES OR WEB TYPE LITTERS CARGO LOADING AS FOR C-54D. C-54J - WITH REMOVAL OF CABIN SEATS CARGO LOADING AS FOR C-54E.							
			T W M C	S L H T W	B C W M												
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 GROSS WEIGHT	TO CLEAR 50' T.O. DIST.	TO CLEAR 50' LAND DIST.	LANDING SPEED	GROUND RUN T.O. DIST.	GROUND RUN LAND DIST.	HIGH SPEED & CLIMB CLEAN AIRPLANE AT NORMAL COMBAT WEIGHT WEIGHT	STD. ALT.	WAR EMERG. HIGH SPEED	WAR EMERG. RATE OF CLIMB	MIL. POWER HIGH SPEED	MIL. POWER RATE OF CLIMB	MAX. CONTIN. POWER HIGH SPEED	MAX. CONTIN. POWER RATE OF CLIMB	MAX. CONTIN. POWER TIME TO CLIMB	RANGE AND ENDURANCE STATUTE AIR MILES-NO WIND- NO ALLOWANCE FOR RESERVE LOADING TAKE OFF WEIGHT	LOADING BOMBS CARGO PASS.	LOADING TOTAL FUEL	MAX. CONTIN. at 10000 FT. RANGE	MAX. CONTIN. at 10000 FT. ENDUR.	LONG RANGE CRUISE at 5000 FT. RANGE	LONG RANGE CRUISE at 5000 FT. ENDUR.	at 10,000 FT. RANGE	at 10,000 FT. ENDUR.	at 15000 FT. RANGE	at 15000 FT. ENDUR.	at 20,000 FT. RANGE	at 20,000 FT. ENDUR.	REMARKS
	LB.	FT.	FT.	M.P.H.	FT.	FT.	LB	FT.	M.P.H.	FT. MIN	M.P.H.	FT. MIN	M.P.H.	FT. MIN	MIN.	LB	LB	U.S. GAL.	MILES	HOURS	MILES	HOURS	MILES	HOURS	MILES	HOURS	MILES	HOURS	
C-54A-DO -1 & -5 C-54A-DC -1 thru -15	40000 50000 55000 60000 65000 73000	- 1900 2300 3200 4100 5600	2000 2500 2800 3200 - -	80 90 95 - - -	- 1300 1600 1800 2400 2900	1300 1600 1800 1900 - -	73000	15000 10000 5000 S L	NONE		- - 270 255	- - 685 700	260 255 227 215	480 625 640 700	25.7 14.8 7.0 0.0	62000 65000 59000 55000 53000	NONE 6000 8000 14000 22000	3620 2720 1820 1820 1820	1850 1475 900 375	7.0 5.8 3.5 4.0	4100 2725 1900 1675	22.5 14.5 10.2 8.9	4075 2750 2050 1700	21.1 13.7 10.8 8.3	4000 2700 1850 1650	19.5 12.9 8.9 7.9	3800 2475 1750 1450	18.3 11.7 8.5 6.7	(c) FIRST 5.0 HRS. OF FLIGHT INCLUDING CLIMB, ARE AT 15000 FT. ALT. (d) FIRST 7.1 HRS. OF FLIGHT INCLUDING CLIMB, ARE AT 15000 FT. ALT. (e) FIRST 3.4 HRS. OF FLIGHT INCLUDING CLIMB, ARE AT 15000 FT. ALT.
C-54B-DO -1 thru -20 C-54B-DC -1	AS ABOVE								AS ABOVE							64000 66000 60500 66500 73000	NONE 7300 7300 13300 21300	3740 2840 2000 2000 2000	1850 1375 975 950 925	7.0 5.2 3.7 3.6 3.6	4100 2800 2050 1850 1700	22.6 14.7 10.9 9.4 8.2	4175 2850 2050 1850 1675	21.4 14.1 10.4 9.0 7.8	4075 2800 2000 1800 1575	19.9 13.3 9.7 8.5 7.7	3875 2600 1875 1625 ABOVE PRAC. CEILING	18.6 12.1 9.3 7.4	
C-54E-DO -1 thru -15 C-54D-DC -1 thru -15	40000 50000 55000 60000 65000 73000	- 2000 2700 3400 4300 5700	2400 2900 3300 3500 - -	80 90 95 - - -	- 1200 1500 2000 2500 3300	1400 1800 2000 2200 - -	73000	20000 15000 10000 5000 S L	NONE		- - - - -	375 550 650 770 840	257 286 258 244 231	250 440 560 710 770	39.1 24.8 14.5 6.2 0.0	63100 54500 60000 56000 53000	NONE 7000 7000 13000 21000	3520 2540 1840 1840 1840	1700 1200 850 825 800	6.5 4.7 3.3 3.3 3.3	3900 2500 1850 1675 1500	21.3 13.6 10.2 8.7 7.2	3850 2500 1825 1650 1475	19.8 12.7 9.5 8.2 7.2	3775 2400 1775 1600 1425	19.2 11.8 8.7 7.8 7.1	3575 [c] 2350 [d] 1725 [e] ABOVE PRAC-TICAL CEILING	17.6 [c] 11.6 [d] 8.5 [e]	
C-54G(DO&DC) -1 C-54J-DO -1	AS ABOVE						73000	20000 15000 10000 5000 S L	AS ABOVE										ABOVE										
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:

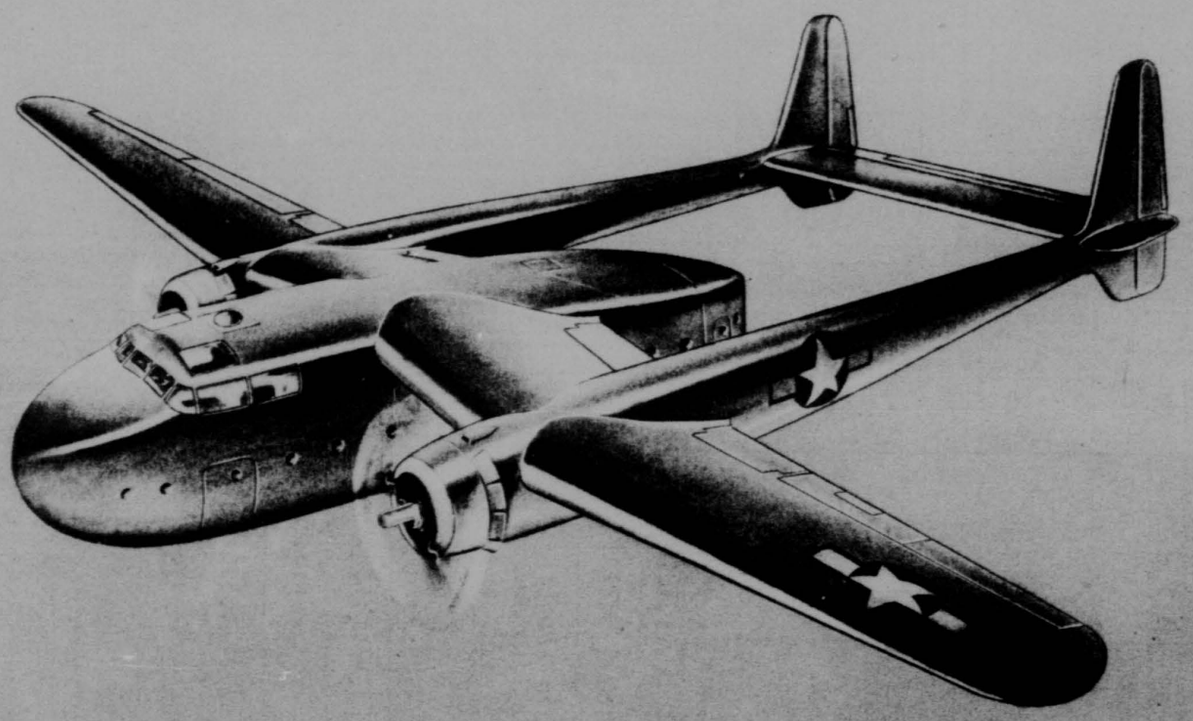
(A)

SCR-211	FREQUENCY METER	MN-26	RADIO COMPASS
SCR-269	RADIO COMPASS	AN/AIC-3	INTERPHONE
SCR-274	COMMAND SET	AN/APN-4	LORAN
SCR-287	LIAISON SET	AN/APN-9	LORAN
SCR-515	IDENTIFICATION EQUIP.	AN/ARA-10	PANEL CONTROL SYSTEM
SCR-522	COMMAND SET	AN/ARC-3	COMMAND SET
SCR-578	EMERGENCY TRANSMITTER	AN/ARC-8	LIAISON SET
SCR-595	IFF	AN/ARC-9	SET
SCR-695	IFF	AN/ARN-5	GLIDE PATH
SCR-718	HIGH ALT. ALTIMETER	AN/ARN-7	COMPASS
RC-32	FILTER EQUIPMENT	AN/ARN-11	COMPASS
RC-36	INTERPHONE	AN/ASA-1	STATIC DISCHARGE
RC-43	MARKER BEACON	AN/ASA-3	STATIC DISCHARGE
RC-103	LOCALIZER	BC-1033	MARKER BEACON
RC-198	FILTER EQUIPMENT		

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

MANUFACTURED BY DOUGLAS (SANTA MONICA) "DO" & (CHICAGO) "DC"

C-54 "SKYMASTER"



PACKET
FAIRCHILD C-82

TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART

AS OF 29 JUNE 1945

MODEL & BLOCK-NO.	ENGINE & PROP. NUMBER	ENGINE MFGR. MODEL SUPERCHARGER PROP. MFGR. TYPE	B.H.P./ALT. T- TAKE OFF W- WAR EMERG. M- MILITARY C- CONTINUOUS	SIZE S-SPAN L-LENGTH H-HEIGHT T-TREAD W-WING AREA	WEIGHT B-BASIC C-COMBAT W-WAR MAX. M-MAX.LAND.	NOTES	COMBAT CREW	FUEL & OIL – FUEL TANKAGE TYPE OR LOCATION ALSO (MAX. OIL)	NO. AND CAPACITY ALSO (MAX.FUEL)	CARGO STATION	CAPACITY	MAX. LOAD LB.	PASSENGERS STATION	PLACES	MAX. LOAD LB.	RADIO TYPICAL MODELS CARRIED (SEE A)
C-69-LO -1 thru -10	4	WRIGHT R-3350-35 SINGLE SPEED HAMILTON STD. 15'2" DIA.-3 BL. F.F., HYDROMATIC	T 2200/ S L W NONE M 2200/ 5000 C 2000/ 5000	S 123' 0" L 95' 2" H 23' 8" T 28' 0" W 1650 Sq. '	B 50500 C 87000 W 101000 * M 82000	* ALL WING TANKS MUST BE FULL.	9	OUTBD.-WINGS INBD. -WINGS (200)	2 x 1590 2 x 820 (4820)	CABIN-MAIN	21000	21000	PERSONNEL BAGGAGE	60 a 2600 #	14600	SCR-522, 274, 695, 578, 287, RC-103, 193 AN/AIA-1 AN/AIC-3 AN/APN-1, 2, 9 AN/ARA-9, 10 AN/ARC-8 AN/ARN-5, 7, 11
C-82 {FA NT	2	PRATT-WHITNEY R-2800-22C INTEGRAL SUPERCH. HAMILTON STD. 15'2" DIA.-3 BL. F.F., HYDROMATIC	T 2100/ S L W NONE M {2100/ 1000 1600/16000 C {1700/ 7000 1450/18500	S 106' 5" L 75' 10" H 26' 4" T 28' 0" W 1400 Sq. '	B 28500 C 42000 * W - M 42000 *	* RESTRICTED TO 42000 LB. PENDING FURTHER MODIFICATIONS.	5	OUTBD.-WINGS INBD. -WINGS AUX. - WINGS (180)	2 x 785 2 x 775 2 - 344 (3464)	CABIN-MAIN	19400	19400	TROOPS PARACANS or LITTERS ATTENDANTS	42 2500 # or 32 4	12600 or 8000	AS ABOVE
C-87-CF	4	PRATT-WHITNEY R-1830-43 or -65 TURBO HAMILTON STD. 11'7" DIA.-3 BL. F.F., HYDROMATIC	T 1200/ S L W NONE M 1200/26500 C 1100/27000	S 110' 0" L 66' 4" H 18' 0" T 25' 8" W 1048 Sq. '	B 33600 C 56000 W 71200 * M 56000	* ALL WING TANKS MUST BE FULL.	5	INBD.-WINGS OUTBD.-WINGS (156)	12 - 2364 6 - 450 (2814)	CABIN-MAIN NOSE COMPART.	11000 1000	12000 (SEE NOTE b)	PERSONNEL BAGGAGE	20 800 #	4800	SCR-274, 269, 211, 287, 578, 695. RC-36, 43, 103.
			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											
COLUMN 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

REMARKS & REFERENCE (18)

REFER TO PAGE 4 FOR "FOREWORD."
REFER TO PAGE 3 FOR SECURITY CLASSIFICATION.
REFER TO PAGE 5 FOR DEFINITIONS.
REFER TO T.O. LISTED FOR DETAILED PLANNING.

C-69 TECHNICAL ORDER 01-75CJ-1. (REV. 15 MAR. 1945)
C-82 (PRELIMINARY INFORMATION) MAY 1945.
C-87 TECHNICAL ORDER 01-5CA-1. (25 APRIL 1945

(a) C-69-10-LO HAS ONLY 43 PLACES: OTHERS HAVE 60.

(b) SOME MODELS HAVE 1-.50 CAL. FLEX. TAIL GUN. WITH 500 RDS.

(A)

SCR-211	FREQUENCY METER
SCR-267	-
SCR-269	RADIO COMPASS
SCR-274	COMMAND SET
SCR-287	LIAISON SET
SCR-522	COMMAND SET
SCR-578	EMERGENCY TRANSMITTER
SCR-695	IFF
RC-36	INTERPHONE AMPLIFIER
RC-43	MARKER BEACON
RC-103	LOCALIZER
RC-193	MARKER BEACON
AN/AIA-1	-
AN/AIC-3	INTERPHONE
AN/APN-1	LOW ALTITUDE ALTIMETER
AN/APN-2	REBECCA (BEACON RECV.)
AN/APN-9	LORAN
AN/ARA-9	-
AN/ARA-10	PANEL CONTROL SYSTEM
AN/ARC-8	LIAISON SET
AN/ARN-5	GLIDE PATH
AN/ARN-7	RADIO COMPASS
AN/ARN-11	RADIO COMPASS
AN/ASA-3	STATIC DISCHARGE

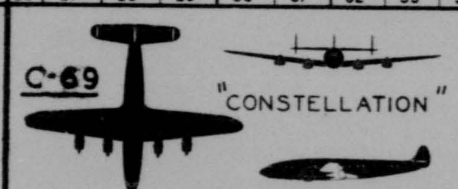
TAKE OFF & LANDING (HARD SURFACE-NO WIND) / HIGH SPEED & CLIMB (CLEAN AIRPLANE AT NORMAL COMBAT WEIGHT)

MODEL & BLOCK-NO.	GROSS WEIGHT LB.	TO CLEAR 50' T.O. DIST. FT	TO CLEAR 50' LAND DIST. FT	LANDING SPEED M.P.H.	GROUND RUN T.O. DIST. FT	GROUND RUN LAND DIST. FT	WEIGHT LB.	STD. ALT. FT	WAR EMERG. HIGH SPEED M.P.H.	WAR EMERG. RATE OF CLIMB FT MIN	MIL. POWER HIGH SPEED M.P.H.	MIL. POWER RATE OF CLIMB FT MIN	MAX.CONTIN.POWER HIGH SPEED M.P.H.	MAX.CONTIN.POWER RATE OF CLIMB FT MIN	MAX.CONTIN.POWER TIME TO CLIMB MIN.
C-69-LO -1 thru -10	55000 70000 75000 80000 93000	- 2300 2700 3100 4500	2400 2900 3000 - -	84 91 92 - -	- 1500 1800 2100 3000	1100 1300 1300 - -	82000	20000 15000 10000 5000 S L	NONE		313 322 329 327 311	- - - 1600 1800	308 317 323 320 304	225 620 1030 1500 1700	25.0 13.3 7.1 3.1 0.0
C-82 {FA NT	30000 35000 42000	- 2000 30009	1800 2000 2300	83 85 91	- 1100 2000	1100 1200 1400	42000	20000 15000 10000 5000 S L	NONE		NO DATA		222 223 219 221 212	425 620 815 1150 1410	24.7 14.2 7.5 4.5 0.0
C-87-CF	35000 40000 45000 50000 56000 62000	- 2100 2500 2900 3800 5000	2300 2700 3000 3200 4300 -	87 90 95 100 105 -	- 1500 1800 2100 2700 3800	2000 2300 2400 2600 3300 -	56000	25000 20000 15000 10000 5000	NONE		306 293 280 266 255	1050 1100 1150 1200 1200	300 287 275 262 248	850 900 950 1000 1000	26.8 20.9 15.3 9.0 4.2
19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34

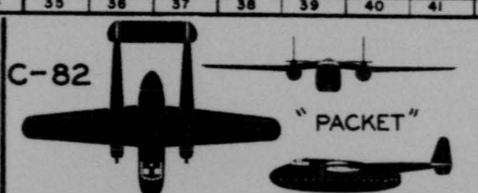
RANGE AND ENDURANCE (STATUTE AIR MILES-NO WIND- NO ALLOWANCE FOR RESERVE)

MODEL & BLOCK-NO.	LOADING TAKE OFF WEIGHT LB.	LOADING ~~BOMBS~~ CARGO ~~PASS.~~ LB.	LOADING TOTAL FUEL U.S. GAL	MAX. CONTIN. at 10000 FT. RANGE MILES	MAX. CONTIN. at 10000 FT. ENDUR. HOURS	LONG RANGE CRUISE at 5000 FT. RANGE MILES	at 5000 FT. ENDUR. HOURS	at 10,000 FT. RANGE MILES	at 10,000 FT. ENDUR. HOURS	at 15,000 FT. RANGE MILES	at 15,000 FT. ENDUR. HOURS	at 20,000 FT. RANGE MILES	at 20,000 FT. ENDUR. HOURS	REMARKS
C-69-LO -1 thru -10	82000 93000	NONE 11000	4816 4816	2275 2200	7.4 7.4	4025 3800	19.4 17.8	4050 3775	17.9 16.6	3925 3675	15.1 15.2	3000 c 3225 d	10.4 c 12.1 d	(c) A.R. MIXTURE NECESSARY FOR ENTIRE FLIGHT. (d) FIRST 5.6 HRS. AT 15,000 FT. WITH A.L. MIXTURE: BALANCE AT 20000 FT. WITH A.R. MIXTURE.
C-82 {FA NT	42000 42000	NONE 5000	1900 1070	1150 650	5.4 3.2	2800 1400	19.6 9.5	2500 1350	15.2 8.3	2375 1100	13.9 6.1	1775 675	9.0 3.3	
C-87-CF	53500 56000 62000	NONE 2500 8500	2814 2814 2814	NO RELIABLE DATA		3175 3050 2800	19.5 18.4 17.0	3150 3025 2775	17.4 16.8 15.7	3050 2950 2700	15.5 14.9 13.7	3000 2875 2600	14.5 14.0 12.9	C-82 FLIGHT TEST REQUESTED
19	35	36	37	38	39	40	41	42	43	44	45	46	47	48

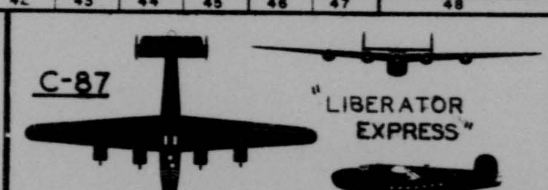
NOTES:
RED FIGURES ARE PRELIMINARY: SUBJECT TO REVISION AFTER FLIGHT CHECK.



LOCKHEED (BURBANK) "LO"



FAIRCHILD (HAGERSTOWN) "FA" & NORTH AMERICAN (DALLAS) "NT"



CONSOLIDATED (FT. WORTH) "CF"

TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART

AS OF 29 JUNE 1945

MODEL & BLOCK NO.	ENGINE & PROP.			SIZE	WEIGHT		COMBAT CREW
	NUMBER	ENGINE MFGR. MODEL SUPERCHARGER PROP. MFGR. 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	NOTES	
P-38G-LO -1 thru -15	2	ALLISON V-1710-51 & -55 TURBO CURTISS 11'6"DIA.-3 BL. F.F., ELECTRIC	T 1225/ S L W NONE M [a] 1150/27000 C 1100/24000	S 52' 0" L 37' 10" H 12' 10" T 16' 5" W 328 Sq. Ft.	B 13500 C 15800 W - M -		1
P-38H-LO -1 & -5	2	ALLISON V-1710-89 & 91 TURBO CURTISS 11'6"DIA.-3 BL. F.F., ELECTRIC	T 1425/ S L W NONE M [d] 1240/25000 C 1100/34000	$ L H T W AS ABOVE	B 13700 C 15300 W - M -		1
P-38J-LO -5 thru -25	2	AS ABOVE	T 1425/ S L W 1600/26500 M 1425/26500 C 1100/32500	$ L H T W AS ABOVE	B 14100 C 17500 W - M -		1
P-38L-LO -1 & -5 P-38L-VN -5	2	ALLISON V-1710-111 & -113 TURBO CURTISS 11'6"DIA.-3 BL. F.F., ELECTRIC	T 1425/ S L W 1600/28700 M 1425/29000 C 1100/33800	$ L H T W AS ABOVE	B C W M AS ABOVE		1
			T W M C	$ L H T W	B C W M		
COLUMN	1	2	3 4	5	6	7	8

MODEL & BLOCK NO.	FUEL & OIL		ARMAMENT			BOMBS			RADIO	REMARKS & REFERENCE
	FUEL TANKAGE		(NO. ROCKETS-SIZE-INSTALLATION)			NO. AND SIZE				
	TYPE OR LOCATION ALSO (MAX. OIL)	NO. AND CAPACITY ALSO (MAX. FUEL)	NO. GUNS AND SIZE	RDS. PER GUN	LOCATION AND TYPE	INTERNAL	EXTERNAL	MAX. LOAD	TYPICAL MODELS CARRIED (SEE A)	REFER TO PAGE 4 FOR "FOREWORD." REFER TO PAGE 3 FOR SECURITY CLASSIFICATION. REFER TO PAGE 5 FOR DEFINITIONS. REFER TO T.O. LISTED FOR DETAILED PLANNING.
P-38G-LO -1 thru -15	MAIN - WINGS RES. - WINGS DROP. - WINGS (26)	2 x 90 2 x 60 2 x 75or 2 x 150 [b] (500)	4-.50 1-20mm	500 150	NOSE - FIXED NOSE-HI CANNON	NONE	2-1000 2- 500 2- 325 2- 250 2- 100	2000	SCR-274 SCR-522 SCR-695 MN- 26 AN/APS-13 AN/ARC-3 BC-1206	P-38G TECH. ORDER 01-75F-1 (REV. 30 SEPT. 1944) P-38H,J,L TECH. ORDER 01-75-1 (REV. 15 FEB. 1945) (a) LIMITED TO 1150 H.P. BECAUSE OF INADEQUATE COOLING. (b) LAST (200) P-38G-10's HAVE MAX. FUEL AS LISTED FOR P-38H MODELS. (c) LAST (200) P-38G-10's HAVE BOMB LOAD AS LISTED FOR P-38H MODELS. (d) LIMITED TO 1240 H.P. BECAUSE OF INADEQUATE COOLING. P-38J's HAVE CORE TYPE COOLER GIVING INCREASED ENGINE RATINGS AS LISTED. (e) ROCKETS INSTALLED ON P-38L-5 MODELS ONLY: CLUSTER OF 3 LOADED ROCKET TUBES (KITS ISSUED FOR EARLY MODELS) UNDER EACH WING, REDUCES TOP SPEED 20 MPH. AT 15000 FT.
P-38H-LO -1 & -5	MAIN - WINGS RES. - WINGS DROP. - WINGS (26)	2 x 90 2 x 60 2 x 75or 2 x 150or 2 x 300 (900)	4-.50 1-20mm	500 150	NOSE - FIXED NOSE-AN - M2C	NONE	2-1600 2-1000 2- 500 2- 325 2- 250 2- 100	3200		
P-38J-LO -5 thru -25	MAIN - WINGS RES. - WINGS L.E. - WINGS DROP. - WINGS (26)	2 x 90 2 x 60 2 x 55 2 x 75 or 2 x 150 or 2 x 165 or 2 x 300 (1010)	A S A B O V E							
P-38L-LO -1 & -5 P-38L-VN -5	A S A B O V E		[e] 10(5") ZERO LENGTH RAIL ROCKETS 4-.50 1-20mm	500 150	NOSE - FIXED NOSE-AN - M2C	A S A B O V E				
COLUMN	9	10	11	12	13	14	15	16	17	18

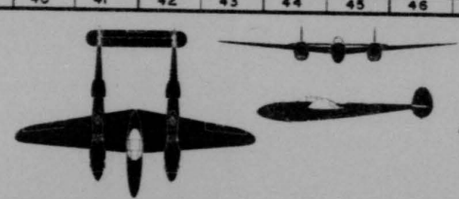
MODEL & BLOCK NO.	TAKE OFF & LANDING (HARD SURFACE - NO WIND)						HIGH SPEED & CLIMB (CLEAN AIRPLANE AT NORMAL COMBAT WEIGHT)									RANGE AND ENDURANCE (STATUTE AIR MILES - NO WIND - NO ALLOWANCE FOR RESERVE)										REMARKS
	GROSS WEIGHT	TO CLEAR 50' T.O. DIST.	TO CLEAR 50' LAND DIST.	LANDING SPEED	GROUND RUN T.O. DIST.	GROUND RUN LAND DIST.	WEIGHT	STD. ALT.	WAR EMERG. HIGH SPEED	WAR EMERG. RATE OF CLIMB	MIL. POWER HIGH SPEED	MIL. POWER RATE OF CLIMB	MAX. CONTIN. POWER HIGH SPEED	MAX. CONTIN. POWER RATE OF CLIMB	MAX. CONTIN. POWER TIME TO CLIMB	LOADING TAKE OFF WEIGHT	LOADING BOMBS CARGO PASS	LOADING TOTAL FUEL	MAX. CONTINUOUS POWER at 10,000 FT. RANGE	MAX. CONTINUOUS POWER at 10,000 FT. ENDUR.	MAX. CONTINUOUS POWER at 25,000 FT. RANGE	MAX. CONTINUOUS POWER at 25,000 FT. ENDUR.	MAX. CRUISE POWER at 10,000 FT. RANGE	MAX. CRUISE POWER at 10,000 FT. ENDUR.	MAX. CRUISE POWER at 25,000 FT. RANGE	MAX. CRUISE POWER at 25,000 FT. ENDUR.	LONG RANGE at 10,000 FT. RANGE	LONG RANGE at 10,000 FT. ENDUR.	
	LB.	FT.	FT.	M.P.H.	FT.	FT.	LB.	FT.	M.P.H.	FT. MIN	M.P.H.	FT. MIN	M.P.H.	FT. MIN	MIN	LB.	LB.	U.S. GAL.	MILES	HOURS	MILES	HOURS	MILES	HOURS	MILES	HOURS	MILES	HOURS	
P-38G-LO -1 thru -15	14000 16000 18000 20000	- 2400 3200 4100	2800 3100 - -	85 90 - -	- 1500 2000 2500	1500 1700 - -	15800	30000 25000 20000 15000 10000 5000	NONE		- 400 390 375 360 345	- 1700 2300 2500 2600 2800	360 390 375 360 348 332	950 1600 1900 2200 * e	18.5 11.0 8.5 6.0 *4.0 2.0	19800 17800 15800 16800 17800	NONE NONE NONE 1000 2000	900 600 300 300 300	1000 700 340 330 310	3.3 2.2 1.0 1.0 1.0	1100 750 350 320 310	3.4 2.2 1.0 1.0 1.0	- 1120 600 550 520	- 4.0 2.0 1.9 1.8	1780 1200 570 510 480	6.2 4.0 1.8 1.7 1.6	2200 1670 850 760 740	10.8 7.9 3.9 3.5 3.5	P-38J & L MODELS HAVE INCREASED DRAG DUE TO EXTERNAL CORE TYPE COOLERS WITH ONE PROP. FEATHERED, LOSS IN LONG RANGE (CLEAN AIRPLANE) IS APPROX. 15% FOR P-38G; APPROX. 25% FOR P-38L. LOSS IN MAX. CONT. POWER RANGE IS APPROX. 25% FOR P-38G; APPROX. 30% FOR P-38L. LOSS IN SPEED FOR P-38L AT MILITARY POWER, CAUSED BY INSTALLATION OF (10) ZERO LENGTH ROCKET RAILS, IS 17 MPH AT 10,000'. SPEED LOSS WITH (10) 5" AR OR HVAR IS 21 MPH AT 10,000' AND 24 MPH AT 25,000'. P-38L FLIGHT TEST IN PROGRESS
P-38H-LO -1 & -5	14000 16000 18000 20000	- 1500 2100 2800	2000 2200 - -	88 95 - -	- 1000 1300 1700	1400 1600 - -	15800	30000 25000 20000 15000 10000 5000	NONE		- 402 387 372 360 345	1850 2500 2850 3200 3400 3500	396 384 370 353 336 318	ϕ ϕ ϕ ϕ ϕ ϕ	ϕ 11.0 8.0 6.5 5.0 3.0 2.0	20800 18300 16300 18300 19500	NONE NONE NONE 2000 3200	900 600 300 300 300	1180 620 350 320 300	4.3 2.1 1.2 1.2 1.2	1150 590 370 320 300	3.5 2.0 1.2 1.2 1.2	1800 1300 500 530 500	6.5 4.3 1.7 2.0 1.9	1700 1160 570 480 450	5.7 3.8 1.8 1.6 1.6	2200 1560 850 750 700	10.3 7.2 4.2 3.6 3.4	
P-38J-LO -5 thru -25	14000 16000 18000 20000 21000	- - 2000 2800 3500	2000 2200 - - -	102 109 - - -	- - 1300 1700 2000	1200 1400 - - -	17500	30000 25000 20000 15000 10000 5000	405 414 403 390 377 360	1625 2425 2925 3275 3525 3675	395 398 385 373 361 346	1700 2400 2650 2900 3100 3200	388 376 361 348 335 317	ϕ ϕ ϕ ϕ ϕ ϕ	ϕ 12.0 9.0 7.0 5.0 4.0 2.0	21600 20200 17500 19500 20700	NONE NONE NONE 2000 3200	1010 740 410 410 410	1050 830 460 430 400	3.8 2.8 1.4 1.4 1.4	1070 900 470 420 410	3.8 2.8 1.4 1.4 1.4	1820 1360 800 710 680	6.9 4.7 2.8 2.7 2.6	1880 1460 840 730 720	6.8 4.9 2.8 2.4 2.4	2260 1910 1170 970 900	12.1 10.8 6.0 4.8 4.8	
P-38L-LO -1 & -5 P-38L-VN -5	14500 16000 18000 20000 22000	- - 2000 2800 3700	2000 2200 - - -	103 109 - - -	- - 1300 1700 2200	1200 1400 - - -	A S A B O V E									A S A B O V E												
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) SCR-274 COMMAND SET
SCR-522 COMMAND SET
SCR-695 IFF
MN-26 RADIO COMPASS
AN/APS-13 TAIL WARNING RADAR
AN/ARC-3 COMMAND SET
BC-1206 BEACON RECEIVER

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

* FIRST 5 MINUTES WITH MILITARY POWER.
ϕ TIME TO CLIMB FROM S.L. BASED ON MILITARY POWER.



P-38 "LIGHTNING"

MANUFACTURED BY LOCKHEED (BURBANK) "LO" & VULTEE (NASHVILLE) "VN"

[redacted]

TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART

PAGE 33 — AS OF 29 JUNE 1945

MODEL & BLOCK NO.	ENGINE & PROP. NUMBER	ENGINE MFGR. MODEL SUPERCHARGER PROP. MFGR. TYPE	B.H.P./ALT. T-TAKE OFF W-WAR EMERG. M-MILITARY C-CONTINUOUS	SIZE S-SPAN L-LENGTH H-HEIGHT T-TREAD W-WING AREA	WEIGHT B-BASIC C-COMBAT W-WAR MAX. M-MAX LAND.	NOTES	COMBAT CREW	FUEL & OIL FUEL TANKAGE TYPE OR LOCATION ALSO (MAX. OIL)	FUEL & OIL FUEL TANKAGE NO. AND CAPACITY ALSO (MAX. FUEL)	ARMAMENT (NO. ROCKETS-SIZE-INSTALLATION) NO. GUNS AND SIZE	ARMAMENT RDS. PER GUN	ARMAMENT LOCATION AND TYPE	BOMBS NO. AND SIZE INTERNAL	BOMBS NO. AND SIZE EXTERNAL	BOMBS MAX. LOAD	RADIO TYPICAL MODELS CARRIED (SEE A)	REMARKS & REFERENCE
P-39N-BE -0,-1 & -5	1	ALLISON V-1710-85 SINGLE SPEED AERO PRODUCTS 11' 7" DIA.-3 BL. CONST.-SPD. - HYDRO.	T 1200/ S.L. W 1430/ 9500 M 1125/ 18400 C 1000/ 14600	S 34' 0" L 30' 2" H 12' 5" T 11' 4" W 213 Sq. Ft.	B 6400 C 7700 W - M -		1	WING - CELLS FELLY - DROP. (14)	12 - 120 1 x 75 gal 1 x 156 gal 1 x 175 (295)	6 (4.5") M-10 ROCKETS IN CLUSTERS OF 3 PROCURED IN SERVICE KITS FOR SOME MODELS 4-.30 300 WINGS - FIXED 2-.50 200 NOSE - FIXED 1-37mm 30 PROP.-TYPE M4			NONE	1-500 1-325 1-250 1-100	500	SCR-274 SCR-522 SCR-535 SCR-695	P-39N SERIES - TECH. ORDER 01-110FN-1 (REV. 25 OCT. 1944) P-39Q SERIES - TECH. ORDER 01-110FN-1 (20 MARCH 1944) (a) P-39Q-30 HAS PROP. DIA. OF 11' 0" (b) P-39Q-20, -25 & -30 DO NOT HAVE WING GUNS.
P-39Q-BE -1 thru -30	1	AS ABOVE	AS ABOVE	AS ABOVE			1	AS ABOVE		6 (4.5") M-10 ROCKETS IN CLUSTERS OF 3 PROCURED IN SERVICE KITS FOR SOME MODELS 2-.50 [b] 300 [b] WINGS - FIXED 2-.50 200 NOSE - FIXED 1-37mm 30 PROP.-TYPE M4			AS ABOVE				
			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												
			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												
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 GROSS WEIGHT LB	TO CLEAR 50' T.O. DIST. FT	TO CLEAR 50' LAND DIST. FT	LANDING SPEED M.P.H.	GROUND RUN T.O. DIST. FT	GROUND RUN LAND DIST. FT	HIGH SPEED & CLIMB CLEAN AIRPLANE AT NORMAL COMBAT WEIGHT WEIGHT LB	STD. ALT. FT	WAR EMERG. HIGH SPEED M.P.H.	WAR EMERG. RATE OF CLIMB FT. MIN.	MIL. POWER HIGH SPEED M.P.H.	MIL. POWER RATE OF CLIMB FT. MIN.	MAX. CONTIN. POWER HIGH SPEED M.P.H.	MAX. CONTIN. POWER RATE OF CLIMB FT. MIN.	MAX. CONTIN. POWER TIME TO CLIMB MIN.	RANGE AND ENDURANCE STATUTE AIR MILES - NO WIND - NO ALLOWANCE FOR RESERVE LOADING TAKE OFF WEIGHT LB	LOADING BOMBS ~~CARGO~~ ~~PASS~~ LB	LOADING TOTAL FUEL U.S. GAL	MAX. CONTINUOUS POWER at 10,000 FT. RANGE MILES	MAX. CONTINUOUS POWER at 10,000 FT. ENDUR. HOURS	MAX. CONTINUOUS POWER at 25,000 FT. RANGE MILES	MAX. CONTINUOUS POWER at 25,000 FT. ENDUR. HOURS	MAX. CRUISE POWER at 10,000 FT. RANGE MILES	MAX. CRUISE POWER at 10,000 FT. ENDUR. HOURS	MAX. CRUISE POWER at 25,000 FT. RANGE MILES	MAX. CRUISE POWER at 25,000 FT. ENDUR. HOURS	LONG RANGE at 10,000 FT. RANGE MILES	LONG RANGE at 10,000 FT. ENDUR. HOURS	REMARKS
P-39N-BE -0,-1 & -5	6800	-	2100	83	-	1200	7700	25000	NO DATA		368	1175	350		6 11.4	8900	NONE	295	550	2.0	950	3.5	-	-	ABOVE CEILING OF AIRPLANE IN MAX. CRUISE POWER		1100	5.6	
	7500	2500	-	-	1600	-		20000			375	1825	355		6 8.1	8800	NONE	276	520	1.9	900	3.3	-	-			1050	5.3	
	8000	3000	-	-	1900	-		15000			378	2450	365		6 5.8	8200	NONE	195	370	1.4	650	2.5	570	2.5			750	3.9	
	8500	3500	-	-	2200	-		10000			357	2600	345		6 3.8	7700	NONE	120	270	0.8	450	1.4	390	1.5			570	2.8	
	9000	4200	-	-	2800	-		5000			330	2600	320		6 1.9	8200	500	120	220	0.8	350	1.3	270	1.5			420	2.1	
P-39Q-BE -1 thru -30	AS ABOVE						7600	AS ABOVE								9000	NONE	295										
																8900	NONE	276										
																8300	NONE	195	AS ABOVE									
																7600	NONE	120										
																8300	500	120										
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) SCR-274 COMMAND SET
SCR-522 COMMAND SET
SCR-535 IFF
SCR-695 IFF

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

6 TIME TO CLIMB FROM S.L. BASED ON MILITARY POWER.

P-39

"AIRACOBRA"

MANUFACTURED BY BELL (BUFFALO) "BE"

TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART

AS OF 29 JUNE 1945

MODEL & BLOCK NO.	ENGINE & PROP.			SIZE	WEIGHT		COMBAT CREW	FUEL & OIL		ARMAMENT			BOMBS			RADIO	REMARKS & REFERENCE
	NUMBER	ENGINE MFGR. MODEL SUPERCHARGER PROP. MFGR. 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	NOTES		FUEL TANKAGE: TYPE OR LOCATION ALSO (MAX. OIL)	FUEL TANKAGE: NO AND CAPACITY ALSO (MAX FUEL)	(NO. ROCKETS-SIZE-INSTALLATION): NO. GUNS AND SIZE	RDS. PER GUN	LOCATION AND TYPE	NO. AND SIZE: INTERNAL	NO. AND SIZE: EXTERNAL	MAX. LOAD	TYPICAL MODELS CARRIED (SEE A)	REFER TO PAGE 4 FOR "FOREWORD." REFER TO PAGE 3 FOR SECURITY CLASSIFICATION. REFER TO PAGE 5 FOR DEFINITIONS. REFER TO T.O. LISTED FOR DETAILED PLANNING.
P-40N-CU -1	1	ALLISON V-1710-81 SINGLE SPEED CURTISS 11'0"DIA.-3 BL. CONST. SPD., ELECTRIC	T 1200/ S.L. W 1480/10000 M 1125/17000 C 1000/14400 [A]	S 37' 4" L 33' 4" H 12' 4" T 8' 2" W 236 Sq. Ft.	B 6400 C 7700 W - M -		1	REAR - WING 1 x 54 FUSELAGE 1 x 58 DROP. - BELLY 1 x 52.75, 150 or 170 (16) (292)		10 (5") ROCKETS OR 6 (4.5") M10 ROCKETS PROCURED IN SERVICE KITS FOR SOME MODELS 4-.50	200	WINGS - FIXED	NONE	1-500 1-325 1-250 3-100 6-20	1-500 2-100 700	SCR-274 SCR-283 SCR-522 SCR-695 MN-26	P-40N TECH. ORDER 01-25CN-1 (REV. 30 APRIL 1945). (a) ALTITUDE LISTED DOES NOT INCLUDE RAM. (b) ENGINE INSTALLATIONS OF P-40N MODELS: P-40N-5 thru -15.....V-1710-81 P-40N-20 thru -35.....V-1710-99 P-40N-40.....V-1710-115
P-40N-CU -5 thru -40	1	ALLISON V-1710-81, 99, 115 [B] SINGLE SPEED CURTISS 11'0"DIA.-3 BL. CONST. SPD., ELECTRIC	T W M C AS ABOVE	S L H T W AS ABOVE	B 6700 C 8400 W - M -		1	REAR - WING 1 x 54 FRONT - WING 1 x 37 FUSELAGE 1 x 70 DROP. - BELLY, or 1 x 75, 150 DROP. - WINGS 2 x 225 (16) (611)		10 (5") ROCKETS OR 6 (4.5") M10 ROCKETS PROCURED IN SERVICE KITS FOR SOME MODELS 6-.50	280	WINGS - FIXED	NONE	3-500 3-325 3-250 3-100 6-20	1500		
			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												
			T W M C	S L H T W	B C W M												
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' T.O. DIST.	TO CLEAR 50' LAND DIST.	LANDING SPEED	GROUND RUN T.O. DIST.	GROUND RUN LAND DIST.	WEIGHT	STD. ALT.	WAR EMERG. HIGH SPEED	WAR EMERG. RATE OF CLIMB	MIL. POWER HIGH SPEED	MIL. POWER RATE OF CLIMB	MAX. CONTIN. POWER HIGH SPEED	MAX. CONTIN. POWER RATE OF CLIMB	MAX. CONTIN. POWER TIME TO CLIMB	LOADING: TAKE OFF WEIGHT	LOADING: BOMBS CARGO PASS.	LOADING: TOTAL FUEL	MAX. CONTINUOUS POWER at 10,000 FT. RANGE	MAX. CONTINUOUS POWER at 10,000 FT. ENDUR.	MAX. CONTINUOUS POWER at 25,000 FT. RANGE	MAX. CONTINUOUS POWER at 25,000 FT. ENDUR.	MAX. CRUISE POWER at 10,000 FT. RANGE	MAX. CRUISE POWER at 10,000 FT. ENDUR.	MAX. CRUISE POWER at 25,000 FT. RANGE	MAX. CRUISE POWER at 25,000 FT. ENDUR.	LONG RANGE at 10,000 FT. RANGE	LONG RANGE at 10,000 FT. ENDUR.	
	LB	FT	FT	M.P.H.	FT	FT	LB	FT	M.P.H.	FT. MIN	M.P.H.	FT. MIN	M.P.H.	FT. MIN	MIN	LB	LB	U.S. GAL	MILES	HOURS	MILES	HOURS	MILES	HOURS	MILES	HOURS	MILES	HOURS	
P-40N-CU -1	7200	-	1700	92	-	1100	7700	25000			332	1225	313	#	#12.4	8850	NONE	292	600	2.0	-	-	1050	4.4	ABOVE CEILING OF AIRPLANE IN MAX. CRUISE POWER		1250	6.7	NOTE: PERFORMANCE SHOWN WITH EXTERNAL WING & BELLY RACKS.
	8000	2700	1800	97	1600	1200		20000			296	1850	330	#	9.1	8250	NONE	197	380	1.4	500	1.9	760	3.2			850	3.4	
	8400	3100	1900	100	1800	1300		15000	NO DATA		348	2400	333	6	6.7	7725	NONE	122	230	0.8	290	1.1	430	1.7			520	2.5	
	8800	3400	-	-	2000	-		10000			331	2525	315	#	4.1	8225	500	122	210	0.8	260	1.1	420	1.8			480	2.3	
	9200	4300	-	-	2600	-		5000			313	2425	297	#	2.1														
P-40N-CU -5 thru -40	7200	-	1700	92	-	1100	8400	25000			325	900	305	#	#13.0	11400	NONE	611	1250	4.4	-	-	2250	9.8			2800	14.1	
	9000	3600	-	-	2200	-		20000			340	1550	325	#	8.8	9500	NONE	331	670	2.3	-	-	1250	5.4			1550	7.6	
	9400	4600	-	-	2700	-		15000	NO DATA		343	2125	328	#	6.0	8900	NONE	236	470	1.6	600	2.3	930	3.9	AS ABOVE		1080	5.1	
	9800	4900	-	-	3100	-		10000			325	2225	310	#	4.7	8400	NONE	161	320	1.1	400	1.4	600	2.3			750	3.5	
	11500	5700	-	-	3500	-		5000			308	2125	291	#	2.4	8900	500	'81	300	1.1	370	1.4	590	2.5			-	-	
	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) SCR-274 COMMAND SET
SCR-283 COMMAND SET
SCR-522 COMMAND SET
SCR-695 IFF
MN-26 RADIO COMPASS

RED FIGURES ARE PRELIMINARY: SUBJECT TO REVISION AFTER FLIGHT CHECK

A TIME TO CLIMB FROM S.L. BASED ON MILITARY POWER

P-40
"WARHAWK"

MANUFACTURED BY CURTISS (BUFFALO) "CU"

TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART

PAGE 35

AS OF 29 JUNE 1945

MODEL & BLOCK NO.	ENGINE & PROP. NUMBER	ENGINE MFGR. MODEL SUPERCHARGER PROP. MFGR. TYPE	B.H.P./ALT. T-TAKE OFF W-WAR EMERG. M-MILITARY C-CONTINUOUS	SIZE S-SPAN L-LENGTH H-HEIGHT T-TREAD W-WING AREA	WEIGHT B-BASIC C-COMBAT W-WAR MAX. M-MAX LAND.	NOTES	COMBAT CREW	FUEL & OIL — FUEL TANKAGE — TYPE OR LOCATION ALSO (MAX. OIL)	FUEL TANKAGE — NO. AND CAPACITY ALSO (MAX. FUEL)	ARMAMENT (NO. ROCKETS-SIZE-INSTALLATION) — NO. GUNS AND SIZE	ARMAMENT — RDS. PER GUN	ARMAMENT — LOCATION AND TYPE	BOMBS — NO. AND SIZE — INTERNAL	BOMBS — NO. AND SIZE — EXTERNAL	BOMBS — MAX. LOAD	RADIO — TYPICAL MODELS CARRIED (SEE A)	REMARKS & REFERENCE
P-47C-RE -1 & -5 P-47D-RA & RE -1 thru -22	1	PRATT-WHITNEY R-2800-21, -59 TURBO CURTISS or HAM. STD. 12'2"DIA.-4 BL. CON. SPD., ELEC. or HYDRO.	T 2000/ S L W 2300/27000 [a] M 2000/27000 [a] C 1625/29000 [a]	S 40' 9" L 36' 1" H 14' 2" [b] T 15' 6" W 300 Sq. Ft.	B 10700 C 13500 W - M -		1	MAIN - FUSEL. AUX. - FUSEL. [d] DROP - BELLY & DROP. - WINGS (29)	1 x 205 1 x 100 1 x 75 or 1 x 110. 2 x 150 or 2 x 300 (1015)	6 or .50 8	267	WINGS - FIXED	NONE	2-1000 [d] 3- 500 [d] 3- 325 [d] 3- 250 [d] 3- 100	2-1000 1- 500 2500	SCR-274 SCR-522 SCR-535 SCR-695 AN/APS-13 AN/ARA-8 AN/ARC-3 BC-1206 MN-26 RC-96	P-47C&D TECH. ORDER 01-65BC-1 (REV. 10 MAY 1945) P-47D (LATER) TECH. ORDER 01-65BC-14 (REV. 5 MAR. 1945) P-47N TECH. ORDER 01-65BD-1 (15 JAN. 1945) (a) P-47D-10 & SUBSEQUENT MODELS HAVE INCREASED CRITICAL ALTITUDES AS LISTED FOR LATER D's. (b) P-47D-22 HAS HEIGHT OF 14'7". (c) ONLY EARLIEST MODELS CARRIED 200 GAL. BELLY TANK. (d) EARLY MODELS HAD BELLY SHACKLE ONLY, CARRYING (1) EXTERNAL BOMB OR FUEL TANK. (e) HAMILTON STD. HYDROMATIC PROP. INSTALLED IN P-47D-25-RE & -27 ONLY; OTHERS HAVE CURTISS ECTRIC PROP. (f) ROCKETS INSTALLED ON P-47D-35-RA ONLY. KITS PROCURED FOR SERVICE INSTALLATION OF ROCKETS ON SOME EARLIER MODELS.
P-47D-RA -23, -26, -28, -30, -35 P-47D-RE -25, -27, -28, -30	1	PRATT-WHITNEY P-2800-59 TURBO CURTISS or HAM. STD. [e] 13'0"DIA.-4 BL. CON. SPD., ELEC. or HYDRO.	T 2000/ S L W 2300/31000 M 2000/33000 C 1625/30000	S 40' 9" L 36' 1" H 14' 7" T 15' 6" W 300 Sq. Ft.	B 10700 C 14500 W - M -		1	MAIN - FUSEL. AUX. - FUSEL. DROP. - BELLY & DROP. - WINGS (29)	1 x 270 1 x 100 1 x 75 or 1 x 110 2 x 150 or 2 x 300 (1080)	[f] 6(5") ROCKETS WITH, OR 10(5") ROCKETS WITHOUT BOMBS OR EXT. TANKS 6 or .50 8	267	WINGS - FIXED	NONE	2-1000 3- 500 3- 325 3- 250 3- 100	2-1000 1- 500 2500		
P-47M-RE -1	1	PRATT-WHITNEY R-2800-57 TURBO CURTISS 13'0"DIA.-4 BL. CONST. SPD., ELECTRIC	T 2100/ S L W 2800/32500 M 2100/38800 C 1700/42000	S 40' 9" L 36' 4" H 14' 9" T 15' 6" W 300 Sq. Ft.	B 11100 C 14700 W - M -		1	MAIN - FUSEL. AUX. - FUSEL. DROP. - BELLY (29)	1 x 270 1 x 100 1 x 110 (480)	6 or .50 8	267	WINGS - FIXED	AS ABOVE				
P-47N-RE -1, -5, -15, -20, -25 P-47N-RA -15, -20	1	PRATT-WHITNEY R-2800-57, -73 or -77 TURBO CURTISS 13'0"DIA.-4 BL. CONST. SPD., ELECTRIC	T W M C — AS ABOVE	S 42' 7" L 36' 1" H 14' 8" T 18' 6" W 322 Sq. Ft.	B 11600 C 16700 W - M -		1	MAIN-FUSEL. AUX.-FUSEL. AUX.-WINGS DROP.-BELLY & DROP.-WINGS (40)	1 x 270 1 x 100 2 x 93 1 x 75 or 1 x 110 2 x 165 or 2 x 300 (1266)	6(5") ROCKETS WITH, OR 10(5") ROCKETS WITHOUT BOMBS OR EXT. TANKS 6 or .50 8	267	WINGS - FIXED	AS ABOVE				
P-47M-RE -1		MODIFICATION	T W M C	S L H T W	B C W M												
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 — GROSS WEIGHT LB	TO CLEAR 50' — T.O. DIST. FT	TO CLEAR 50' — LAND DIST. FT	LANDING SPEED M.P.H	GROUND RUN — T.O. DIST. FT	GROUND RUN — LAND DIST. FT	HIGH SPEED & CLIMB — CLEAN AIRPLANE AT NORMAL COMBAT WEIGHT — WEIGHT LB	STD. ALT. FT	WAR EMERG. — HIGH SPEED M.P.H	WAR EMERG. — RATE OF CLIMB FT. MIN	MIL. POWER — HIGH SPEED M.P.H	MIL. POWER — RATE OF CLIMB FT. MIN	MAX. CONTIN. POWER — HIGH SPEED M.P.H	MAX. CONTIN. POWER — RATE OF CLIMB FT. MIN	MAX. CONTIN. POWER — TIME TO CLIMB MIN
P-47C-RE -1 & -5	11000	-	2200	92	-	1200	13500	30000	433	1375	420	-	384	800	20.0
	12000	3000	2400	98	1900	1400		25000	421	1825	416	1750	375	ϕ	ϕ 15.0
P-47D-RA & RE -1 thru -22	14000	3400	2800	106	2300	1800		20000	406	2150	400	2060	365	ϕ	11.0
	16000	4400	-	-	3000	-		15000	390	2400	384	2200	350	ϕ	7.2
	18000	6000 [1]	-	-	4100	-		10000	372	2625	368	2300	335	ϕ	4.3
								5000	353	2750	352	2350	320	ϕ	2.2
P-47D-RA -23, -26, -28, -30, -35	11000	-	2200	92	-	1200	14500	30000	426	1475	411	1225	381	ϕ	ϕ 14.0
	12000	3000	2400	98	1900	1400		25000	428	2225	407	1825	372	ϕ	11.0
P-47D-RE -25, -27, -28, -30	14000	3400	2600	106	2300	1800		20000	415	2650	398	2125	362	ϕ	8.5
	16000	4400	-	-	3000	-		15000	398	2875	377	2325	347	ϕ	6.2
	18000	6000	-	-	4100	-		10000	382	3050	362	2400	334	ϕ	4.1
	20000	8500	-	-	6700	-		5000	363	3125	347	2425	319	ϕ	2.0
P-47M-RE -1	MODIFICATION						14700	30000	470	2175	433	1525	403	ϕ	ϕ 13.8
								25000	453	2600	416	1850	386	ϕ	10.8
								20000	435	2975	400	2100	370	ϕ	8.3
								15000	418	3200	383	2325	355	ϕ	6.0
								10000	400	3400	366	2450	340	ϕ	3.9
								5000	385	3500	350	2550	326	ϕ	1.9
P-47N-RE -1, -5, -15, -20, -25	12000	-	3500	115	-	2100	16700	30000	460	-	422	1300	400	-	
	16000	4600	4100	125	3100	2700		25000	448	-	406	1550	385	ϕ	ϕ 14.8
P-47N-RA -15, -20	18000	5900	-	-	4100	-		20000	431	2550	390	1700	370	ϕ	11.7
	20000	8500	-	-	6700	-		15000	415	2750	374	1725	355	ϕ	8.7
								10000	397	2775	358	1725	340	ϕ	5.8
								5000	381	2775	342	1725	325	ϕ	2.9
COLUMN	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34

MODEL & BLOCK NO.	RANGE AND ENDURANCE — STATUTE AIR MILES - NO WIND - NO ALLOWANCE FOR RESERVE — LOADING — TAKE OFF WEIGHT LB	BOMBS CARGO PASS. LB	TOTAL FUEL U.S. GAL	MAX. CONTINUOUS POWER at 10,000 FT. — RANGE MILES	MAX. CONTINUOUS POWER at 10,000 FT. — ENDUR. HOURS	MAX. CONTINUOUS POWER at 25,000 FT. — RANGE MILES	MAX. CONTINUOUS POWER at 25,000 FT. — ENDUR. HOURS	MAX. CRUISE POWER at 10,000 FT. — RANGE MILES	MAX. CRUISE POWER at 10,000 FT. — ENDUR. HOURS	MAX. CRUISE POWER at 25,000 FT. — RANGE MILES	MAX. CRUISE POWER at 25,000 FT. — ENDUR. HOURS	LONG RANGE at 10,000 FT. — RANGE MILES	LONG RANGE at 10,000 FT. — ENDUR. HOURS	REMARKS
P-47C-RE -1 & -5	18300	-	1015	-	-	-	-	-	-	-	-	-	-	HIGH SPEED LOSSED AT MILITARY POWER WHEN CARRYING 10(5") AR OR HVAR's OR RAILS WILL BE APPROX. AS FOLLOWS: WITH ROCKETS ON RAILS 5000' 25000' P-47D.....20 mph.....29 mph P-47N.....22 mph.....25 mph WITH RAILS (NO ROCKETS) 5000' 25000' P-47D.....5 mph.....10 mph P-47N.....7 mph.....15 mph P-47N FLIGHT TESTS SHOW THAT ADDITION OF AR OR HVAR'S AND RAILS DECREASE MAX. RANGE OF CLEAN P-47N MODEL BY APPROX. 500 MILES AT 15000 FT. ALT. P-47D FLIGHT TEST REQUESTED P-47N FLIGHT TEST IN PROGRESS
P-47D-RA & RE -1 thru -22	16200		680	690	2.7	790	2.7	-	-	-	-	1720	7.5	
	15600		605	650	2.4	720	2.3	-	-	-	-	1520	6.6	
	14300	NONE	415	440	1.6	480	1.5	-	-	-	-	1030	4.4	
	14100		380	400	1.4	440	1.4	-	-	-	-	920	4.0	
	13500		305	320	1.1	350	1.0	640	2.3	640	2.1	835	3.5	
P-47D-RA -23, -26, -28, -30, -35	19400		1080	-	-	-	-	-	-	-	-	-	-	
	17500		780	-	-	-	-	-	-	-	-	1800	9.2	
P-47D-RE -25, -27, -28, -30	16700		670	850	2.9	820	2.4	950	3.7	960	3.4	1520	7.9	
	15400	NONE	480	-	-	-	-	-	-	-	-	-	-	
	15100		445	-	-	-	-	-	-	-	-	-	-	
	14600		370	450	1.5	440	1.4	560	1.9	580	1.9	1020	4.4	
P-47M-RE -1	15500	NONE	480	-	-	-	-	-	-	-	-	-	-	
	14700		370	450	1.5	460	1.4	560	1.9	590	1.9	1020	4.4	
P-47N-RE -1, -5, -15, -20, -25	20600	NONE	1156	1280	5.2	1550	4.9	-	-	-	-	2850	13.0	
	19400	NONE	996	-	-	-	-	-	-	-	-	2800	12.7	
P-47N-RA -15, -20	15700	NONE	556	770	2.4	840	2.4	1000	4.5	800	3.4	1700	7.3	
	18300	1500	556	-	-	-	-	-	-	-	-	-	-	
	19300	2500	556	-	-	-	-	-	-	-	-	-	-	
COLUMN	35	36	37	38	39	40	41	42	43	44	45	46	47	48

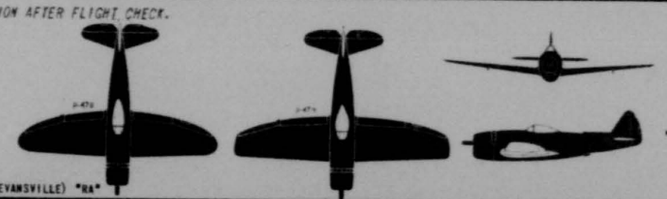
NOTES:

(A) THREE OR MORE OF THE FOLLOWING:

SCR-274	COMMAND SET
SCR-522	COMMAND SET
SCR-535	IFF
SCR-595	IFF
MN-26	COMPASS
RC-96	CONTACTOR EQUIPMENT
AN/APS-13	TAIL WARNING RADAR
AN/ARA-8	HOMING ADAPTER
AN/ARC-3	COMMAND (VHF)
BC-1206	BEACON RECEIVER

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

ϕ TIME TO CLIMB FROM S.L. BASED ON MILITARY POWER.



MANUFACTURED BY REPUBLIC (FARMINGDALE) "RE" & (EVANSVILLE) "RA"

P-47 THUNDERBOLT

TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART

AS OF 29 JUNE 1945

MODEL & BLOCK NO.	ENGINE & PROP. NUMBER	ENGINE & PROP. ENGINE MFGR. MODEL SUPERCHARGER PROP. MFGR. TYPE	ENGINE & PROP. B.H.P./ALT. T-TAKE OFF W-WAR EMERG. M-MILITARY C-CONTINUOUS	SIZE S-SPAN L-LENGTH H-HEIGHT T-TREAD W-WING AREA	WEIGHT B-BASIC C-COMBAT W-WAR MAX. M-MAX LAND	WEIGHT NOTES	COMBAT CREW	FUEL & OIL FUEL TANKAGE TYPE OR LOCATION ALSO (MAX. OIL)	FUEL & OIL FUEL TANKAGE NO. AND CAPACITY ALSO (MAX FUEL)	ARMAMENT (NO. ROCKETS-SIZE-INSTALLATION) NO. GUNS AND SIZE	ARMAMENT RDS. PER GUN	ARMAMENT LOCATION AND TYPE	BOMBS NO. AND SIZE INTERNAL	BOMBS EXTERNAL	BOMBS MAX. LOAD	RADIO TYPICAL MODELS CARRIED (SEE A)	REMARKS & REFERENCE
P-51B-NA -1,-5,-7,-10 P-51C-NT -1 & -3	1	PACKARD V-1650-3 2 SPEED-2 STAGE HAMILTON STD. 11'2" DIA.-4 BL. CONST. SPD., HYDRO.	T 1400/ S.L. W 1520/16800, 1295/29200 M 1450/19800, 1190/31000 C 1120/20500, 940/24000	S 37' 0" L 32' 3" H 13' 8" T 11' 10" W 233 Sq. Ft.	B 7450 C 9800 W - M -		1	MAIN - R. WING MAIN - L. WING FUSELAGE DROP. - WINGS (21)	1 x 92 1 x 92 1 x 85 2 x 75 or 2 x 110 or 2 x 150 (569)	4(5") ROCKETS OR 6(5") H-10 ROCKETS PROCURED IN SERVICE KITS FOR SOME MODELS. 2) 2) .50	280 350	OUTBD. - WINGS INBD. - WINGS	NONE	2-1000 2- 500 2- 325 2- 250 2- 100	2000	SCR-274 SCR-515 SCR-522 SCR-535 SCR-595 SCR-695 AN-ARA-8 AN/ARC-3 AN/APS-13 BC-1206 HN-26	P-51B & C TECH. ORDER 01-60J0-1 (REV. 25 MAY 1945) P-51D & K TECH. ORDER 01-60JE-1(REV. 25 MAY 1945) P-51H TECH. ORDER 01-60JF-1 (REV. 25 APR. 1945) (a) P-51K-NT HAS 11'0" DIA. AEROPRODUCTS PROPELLER INSTALLED, GIVING APPROX. SAME PERFORMANCE AS SHOWN WITH HAMILTON STD. PROP. (b) ROCKETS INSTALLED ON LAST (1100) P-51D-25-NA; P-51D-20-NT; P-51K-10 & -15 AND SUBSEQUENT MODELS. KITS PROCURED FOR SERVICE INSTALLATION ON SOME OF OTHER MODELS.
P-51B-NA -15 P-51C-NT -5 & -10	1	PACKARD V-1650-7 2 SPEED-2 STAGE HAMILTON STD. 11'2"DIA.-4 BL. CONST. SPD., HYDRO.	T 1450/ S.L. W 1695/10300, 1390/24000 M 1550/13000, 1250/26500 C 1150/17000, 980/29000	$ L H T W AS ABOVE	$ B C W M AS ABOVE		1	AS ABOVE		AS ABOVE							
P-51D-NA -5 thru -30 P-51D-NT -5 thru -25 P-51K-NT -1 thru -15	1	AS ABOVE EXCEPT P-51D-25NT & P-51D-30-NA HAVE V-1650-9 ENGINE INSTALLED	AS ABOVE	$ L H T W AS ABOVE	B 7650 C 10100 W - M -		1	MAIN - R. WING MAIN - L. WING FUSELAGE DROP. - WINGS (21)	1 x 92 1 x 92 1 x 85 2 x 75 or 2 x 110 (489)	6(5") ROCKETS WITH, OR 10(5") ROCKETS WITHOUT EXTERNAL WING BOMBS OR TANKS. 2) 2) .50	270 270 400	OUTBD. - WINGS CENTER - WINGS INBD. - WINGS	NONE	2-1000 2- 500 2- 325 2- 250 2- 100	2000		
P-51H-NT	1	PACKARD V-1650-9. 2 SPEED-2STAGE AEROPRODUCTS 11'1"DIA.-4 BL. CONST. SPD., HYDRO.	T 1380/ S.L. W 2220/10200, 1800/25400 M 1470/21300, 1190/34900 C 1080/22100, 920/35000	S 37' 0" L 33' 4" H 13' 8" T 11' 1" W 235 Sq. Ft.	B 7050 C 9500 W - M -		1	MAIN - R. WING MAIN - L. WING FUSELAGE DROP. - WINGS (21)	1 x105 1 x100 1 x 50 2 x 75 or 2 x 110 (475)	AS ABOVE							
			T W M C	S L H T W	B C W M												
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 GROSS WEIGHT LB	TO CLEAR 50' T.O. DIST. FT	TO CLEAR 50' LAND DIST. FT	LANDING SPEED MPH	GROUND RUN T.O. DIST. FT	GROUND RUN LAND DIST. FT	HIGH SPEED & CLIMB CLEAN AIRPLANE AT NORMAL COMBAT WEIGHT WEIGHT LB	STD. ALT. FT	WAR EMERG. HIGH SPEED MPH	WAR EMERG. RATE OF CLIMB FT/MIN	MIL. POWER HIGH SPEED MPH	MIL. POWER RATE OF CLIMB FT/MIN	MAX. CONTIN. POWER HIGH SPEED MPH	MAX. CONTIN. POWER RATE OF CLIMB FT/MIN	MAX. CONTIN. POWER TIME TO CLIMB MIN
P-51B & C SERIES WITH (V-1650-3)	8000 9000 10000 11000 12000	- 2200 2500 3000 3500	2100 2300 2500 - -	100 106 111 - -	- 1500 1800 2000 2400	1100 1200 1300 - -	9500	30000 25000 20000 15000 10000 5000	440 430 427 424 406 388	1825 2425 2525 3075 3150 3050	433 418 427 414 392 374	1825 2175 2475 2800 2700 2600	397 390 405 373 353 335	- 1200 1550 1800 1800 1770	- 15.0 11.5 8.5 5.6 2.8
P-51B & C SERIES WITH (V-1650-7)	A S A B O V E						9800	30000 25000 20000 15000 10000 5000	435 439 425 414 417 395	1425 2100 2525 2900 3075 3550	435 428 414 414 416 381	1425 2100 2575 2950 3075 3275	415 406 390 388 362 340	- 1400 1450 1800 1800 1750	- 15.0 11.5 8.5 5.6 2.9
P-51D & K SERIES	A S A B O V E						10100	30000 25000 20000 15000 10000 5000	433 437 424 413 416 395	1300 1950 2575 2775 2925 3475	433 428 412 413 415 381	1300 1950 2425 2300 2925 3100	413 404 388 367 360 340	AS ABOVE	
P-51H-NT	A S A B O V E						9500	30000 25000 20000 15000 10000 5000	486 487 470 ★ 463 463 444	2650 3400 4000 4000 4675 5350	440 425 430 415 395 370	2250 2500 2600 3100 3000 2980	404 395 397 378 357 337	- 1125 1525 1750 1725 1700	- 15.5 12.8 9.0 5.9 2.9

MODEL & BLOCK NO.	RANGE AND ENDURANCE STATUTE AIR MILES - NO WIND - NO ALLOWANCE FOR RESERVE LOADING TAKE OFF WEIGHT LB	LOADING BOMBS ~~CARGO~~ ~~PASS.~~ LB	LOADING TOTAL FUEL U.S. GAL	MAX. CONTINUOUS POWER at 10,000 FT. RANGE MILES	MAX. CONTINUOUS POWER at 10,000 FT. ENDUR. HOURS	MAX. CONTINUOUS POWER at 25,000 FT. RANGE MILES	MAX. CONTINUOUS POWER at 25,000 FT. ENDUR. HOURS	MAX. CRUISE POWER at 10,000 FT. RANGE MILES	MAX. CRUISE POWER at 10,000 FT. ENDUR. HOURS	MAX. CRUISE POWER at 25,000 FT. RANGE MILES	MAX. CRUISE POWER at 25,000 FT. ENDUR. HOURS	LONG RANGE at 10,000 FT. RANGE MILES	LONG RANGE at 10,000 FT. ENDUR. HOURS	REMARKS
P-51B & C SERIES WITH (V-1650-3)	11800 11300 10800 9800 10800 11800	NONE NONE NONE NONE 1000 2000	569 489 419 269 269 269	1520 1270 1100 740 690 660	4.7 4.0 3.4 2.1 2.2 2.2	1880 1440 1240 810 830 720	5.2 4.1 3.5 2.2 2.4 2.2	2000 1870 1670 1170 1050 1000	7.3 6.8 6.0 4.2 3.7 3.6	2100 - 1720 1100 1150 -	7.1 - 6.0 3.2 3.9 -	2640 2070 1840 1280 1180 1070	10.8 8.5 7.7 5.1 4.9 4.3	'P-51B & C PERFORMANCE SHOWN WITH EXTERNAL WING RACKS: WITHOUT RACKS THE HIGH SPEED INCREASES APPROX. 12 MPH. & RATE OF CLIMB APPROX. 50 FT. TO 100 FT. PER MIN. P-51D, K & H PERFORMANCE SHOWN WITHOUT EXTERNAL WING RACKS: WITH RACKS THE HIGH SPEED LOSS IS 4 TO 6 MPH. HIGH SPEED LOSSES AT MILITARY POWER WHEN CARRYING 10(5") AR OR HVAR's OR RAILS WILL BE APPROX: WITH ROCKETS ON RAILS 10000' 25000' P-51D.....40 mph ...47 mph. WITH RAILS (NO ROCKETS) 10000' 25000' P-51D.....10 mph ...17 mph. P-51D FLIGHT TEST IN PROGRESS P-51H FLIGHT TEST REQUESTED
P-51B & C SERIES WITH (V-1650-7)	11800 11300 10800 9800 10800 11800	NONE NONE NONE NONE 1000 2000	569 489 419 269 269 269	1750 1500 1280 870 790 780	5.4 4.6 3.9 2.4 2.4 2.4	1950 1650 1430 950 870 850	5.4 4.6 4.0 2.4 2.4 2.4	2200 1700 1550 1100 950 950	7.6 5.6 5.0 3.3 3.4 3.4	2100 1850 1670 1050 1020 950	6.1 5.7 5.0 2.8 3.1 2.8	2440 2080 1850 1300 1150 1080	9.8 8.5 7.7 5.0 4.8 4.3	
P-51D & K SERIES	11500 11100 10100 11100 12100	NONE NONE NONE 1000 2000	489 419 269 269 269	1500 1270 870 790 770	4.6 3.9 2.4 2.4 2.4	1650 1410 950 870 840	4.6 3.9 2.4 2.4 2.5	1620 1550 1050 1000 950	5.4 4.9 3.2 3.7 3.5	1770 1570 1050 950 900	5.4 4.9 2.8 3.0 2.9	2080 1830 1300 1150 1070	8.5 7.7 5.0 4.8 4.3	
P-51H-NT	11000 10500 9500 10500 11500	NONE NONE NONE 1000 2000	475 405 255 255 255	1320 1150 750 670 650	4.0 3.4 2.1 2.1 2.1	1470 1270 800 720 670	4.2 3.5 2.1 2.1 2.1	1670 1400 900 820 800	5.0 5.0 2.7 2.8 2.8	1750 1570 970 890 -	6.2 5.6 2.8 3.1 -	2050 1720 1170 1020 950	8.5 7.2 4.9 4.3 4.0	

NOTES: THREE OR MORE OF THE FOLLOWING:

(A)
- SCR-274 COMMAND SET
- SCR-515 IFF
- SCR-522 COMMAND SET
- SCR-535 IFF
- SCR-595 IFF
- SCR-695 IFF
- AN/ARA-8 HOMING ADAPTER
- AN/ARC-3 COMMAND (VHF)
- AN/APS-13 TAIL WARNING RADAR
- BC-1206 BEACON RECEIVER
- HN-26 RADIO COMPASS

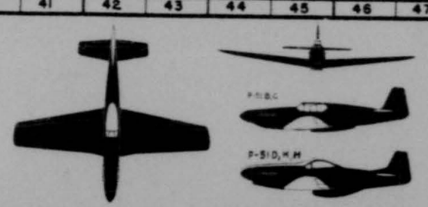
WEIGHT LB	STD. ALT. FT	WAR EMERG. HIGH SPEED MPH	WAR EMERG. RATE OF CLIMB FT/MIN
9500	30000	450	2250
	25000	435	2750
	20000	430	3050
	15000	430	3220
	10000	405	3350
	5000	380	3300

P-51H TEST RESULTS BASED ON 67" HG. (DRY ENGINE)

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

★ WAR EMERGENCY HIGH SPEED AND RATE OF CLIMB BASED ON 90" HG. (WET ENGINE)

MANUFACTURED BY NORTH AMERICAN (INGLEWOOD) "NA" & (DALLAS) "NT"



P-51

"MUSTANG"

TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART

AS OF 29 JUNE 1945

MODEL & BLOCK NO.	ENGINE & PROP. NUMBER	ENGINE MFGR. MODEL SUPERCHARGER PROP. MFGR. TYPE	B.H.P./ALT. T-TAKE OFF W-WAR EMERG. M-MILITARY C-CONTINUOUS	SIZE S-SPAN L-LENGTH H-HEIGHT T-TREAD W-WING AREA	WEIGHT B-BASIC C-COMBAT W-WAR MAX. M-MAX LAND. NOTES	COMBAT CREW	FUEL & OIL: FUEL TANKAGE: TYPE OR LOCATION ALSO (MAX. OIL.)	FUEL & OIL: FUEL TANKAGE: NO AND CAPACITY ALSO (MAX. FUEL)	ARMAMENT (NO ROCKETS SIZE INSTALLATION): NO. GUNS AND SIZE	ARMAMENT: RDS. PER GUN	ARMAMENT: LOCATION AND TYPE	BOMBS NO. AND SIZE: INTERNAL	BOMBS NO. AND SIZE: EXTERNAL	BOMBS: MAX. LOAD	RADIO: TYPICAL MODELS CARRIED (SEE A)	REMARKS & REFERENCE
P-61A-NO -1	2	PRATT-WHITNEY R-2800-10 2 SPD.-2 STG. CURTISS 12'2"DIA.-4 BL F.F., ELECTRIC	T 2000/ S L W NONE 2000/ 4000 1800/ 15600 1650/ 20900 M 1675/ 8400 1625/ 17800 C 1550/ 22700	S 30' 0" L 48' 11" H 14' 8" T 17' 2" W 664 Sq. Ft.	B 22300 C 27600 W - M -	2 or 3	OUTBD.-WINGS INBD. -WINGS (44)	2 x 205 2 x 115 (640)	4-.50 4-20mm	560 200	UPPER TURRET FORE-FUSELAGE	NONE			SCR-522(2) SCR-695 SCR-718 SCR-720 SCR-729 RC-32 RC-36 RC-198 MN-26 AN/APG-1 AN/APN-1 AN/APS-13 AN/ARC-3 AN/ARN-7 AN/ASA-3 BC-1206	REFER TO PAGE 4 FOR "FOREWORD." REFER TO PAGE 3 FOR SECURITY CLASSIFICATION. REFER TO PAGE 5 FOR DEFINITIONS. REFER TO T.O. LISTED FOR DETAILED PLANNING. P-61A & B TECH. ORDER 01-15FB-1 (REV. 10 MAY 1945) (a) INSTALLED ON FIRST 37 (P-61A-1) ONLY. (b) THE (2) 310 GAL. DROPPABLE WING TANKS OR 2-1600 LB. BOMBS INSTALLED ONLY ON P-61A-11; P-61B-2,-6 & -11 MODELS; OTHERS AS ABOVE.
P-61A-NO -5,-10,-11 P-61B-NO -1,-2,-5,-6,-11	2	AS ABOVE EXCEPT CHANGE TO R-2800-65 ENGINE	T 2000/ S L W 2260/ 1000 2040/ 12800 1930/ 17000	AS ABOVE EXCEPT P-61B HAS 49' 7" LENGTH	B 22300 C 28000 W - M -	2	OUTBD.-WINGS INBD. -WINGS DROP. -WINGS (84)	2 x 205 2 x 115 2 x 165 or 2 x 310 b (1260)	4-20mm	200	FORE-FUSELAGE	NONE	2-1600 b 2-1000 2- 500 2- 325 2- 250 2- 100	3200		
P-61B-NO -10	2	AS ABOVE	M 2000/ 4000 1800/ 15600 1650/ 20900	AS ABOVE	B 22550 C 28000 W - M -	2	OUTBD.-WINGS INBD.- WINGS DROP.- WINGS (84)	2 x 205 2 x 115 4 x 165 or 4 x 310 (1880)	A S A B O V E			NONE	4-1600 4-1000 4- 500 4- 325 4- 250 4- 100	6400		
P-61B-NO -15,-16,-20,-25	2	AS ABOVE	C 1675/ 8400 1625/ 17800 1550/ 22700	AS ABOVE	B 23450 C 29700 W - M -	3	AS ABOVE EXCEPT P-61B-16 CARRIES ONLY (2) DROPPABLE WING TANKS.		4-.50 4-20mm	560 200	UPPER TURRET FORE-FUSELAGE	AS ABOVE EXCEPT P-61B-16 HAS ONLY (2) EXTERNAL BOMB STATIONS IN PLACE OF (4)				
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): GROSS WEIGHT LB	TO CLEAR 50': T.O. DIST. FT	TO CLEAR 50': LAND DIST. FT	LANDING SPEED M.P.H.	GROUND RUN: T.O. DIST. FT	GROUND RUN: LAND DIST. FT	HIGH SPEED & CLIMB (CLEAN AIRPLANE AT NORMAL COMBAT WEIGHT): WEIGHT LB	STD. ALT. FT	WAR EMERG.: HIGH SPEED M.P.H.	WAR EMERG.: RATE OF CLIMB FT/MIN	MIL. POWER: HIGH SPEED M.P.H.	MIL. POWER: RATE OF CLIMB FT/MIN	MAX. CONTIN. POWER: HIGH SPEED M.P.H.	MAX. CONTIN. POWER: RATE OF CLIMB FT/MIN	MAX. CONTIN. POWER: TIME TO CLIMB MIN
P-61A-NO -1	24000	-	2100	-	-	1400	27600	30000			-	-	-	500	18.1
	26000	2600	2200	-	1600	1500		25000			360	1050	360	#	# 14.0
	28000	2900	2300	-	1900	1700		20000	NOT APPLICABLE		356	1575	355	#	10.1
								15000			350	1925	343	#	7.1
								10000			333	2025	323	#	4.5
								5000			324	2175	305	#	2.2
P-61A-NO -5,-10,-11 P-61B-NO -1,-2,-5,-6,-11	24000	-	2100	-	-	1400	26000	30000	-	-	-	-	-	475	18.9
	26000	2600	2200	-	1600	1500		25000	356	1025	360	1025	360	#	# 14.3
	28000	2900	2300	-	1900	1700		20000	369	1625	356	1550	355	#	10.3
	30000	3300	-	-	2200	-		15000	364	2250	350	1900	343	#	7.2
	32000	3800	-	-	2600	-		10000	355	2550	333	2000	323	#	4.6
								5000	336	2600	324	2150	305	#	2.2
P-61B-NO -10	24000	-	2100	-	-	1400									
	28000	2900	2300	-	1900	1700									
	30000	3300	-	-	2200	-									
	32000	3800	-	-	2600	-			A S A B O V E						
	34000	-	-	-	-	-									
	36000	-	-	-	-	-									
P-61B-NO -15,-16,-20,-25	26000	-	2200	-	-	1500	29700	30000	-	-	-	-	-	-	-
	30000	3800	-	-	2200	-		25000	352	825	358	800	357	-	-
	32000	3800	-	-	2600	-		20000	366	1400	354	1300	352	#	6 12.0
	34000	-	-	-	-	-		15000	362	1950	348	1575	340	#	8.6
	36000	-	-	-	-	-		10000	352	2225	331	1675	318	#	5.6
	38000	-	-	-	-	-		5000	333	2250	322	1825	300	#	2.7
COLUMN 19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34

MODEL & BLOCK NO.	RANGE AND ENDURANCE (STATUTE AIR MILES-NO WIND- NO ALLOWANCE FOR RESERVE): LOADING: TAKE OFF WEIGHT LB	BOMBS CARGO PASS. LB	TOTAL FUEL U.S. GAL	MAX. CONTINUOUS POWER at 10,000 FT.: RANGE MILES	MAX. CONTINUOUS POWER at 10,000 FT.: ENDUR. HOURS	MAX. CONTINUOUS POWER at 25,000 FT.: RANGE MILES	MAX. CONTINUOUS POWER at 25,000 FT.: ENDUR. HOURS	MAX. CRUISE POWER at 10,000 FT.: RANGE MILES	MAX. CRUISE POWER at 10,000 FT.: ENDUR. HOURS	MAX. CRUISE POWER at 25,000 FT.: RANGE MILES	MAX. CRUISE POWER at 25,000 FT.: ENDUR. HOURS	LONG RANGE at 10,000 FT.: RANGE MILES	LONG RANGE at 10,000 FT.: ENDUR. HOURS	REMARKS
P-61A-NO -1	27600	NONE	640	370	1.2	420	1.3	810	2.7	790	2.9	1020	4.5	PERFORMANCE SHOWN WITHOUT DE-ICERS. (c) CRUISE AT 15000' UNTIL EXTERNAL TANKS ARE EMPTY: DROP EXTERNAL TANKS: CLIMB TO 25000' AND COMPLETE FLIGHT.
P-61A-NO -5,-10,-11 P-61B-NO -1,-2,-5,-6,-11	32400	NONE	1260	750	2.4	-	-	-	-	-	-	1900	8.8	
	30400	NONE	970	560	1.8	620	1.8	1140	4.5	1030 C	4.1	1425	6.3	
	28000	NONE	640	370	1.2	420	1.3	810	2.7	790	2.9	1020	4.5	
	30000	2000	640	-	-	-	-	-	-	-	-	-	-	
P-61B-NO -10	36650	NONE	1880	-	-	-	-	-	-	-	-	-	-	P-61B FLIGHT TEST IN PROGRESS
	32750	NONE	1260	750	2.4	-	-	-	-	-	-	1900	8.8	
	30750	NONE	970	560	1.8	620	1.8	1140	4.5	1030 C	4.1 C	1425	6.3	
	28350	NONE	640	370	1.2	420	1.3	800	2.7	600	2.2	1020	4.5	
	30350	2000	640	-	-	-	-	-	-	-	-	-	-	
	32350	4000	640	-	-	-	-	-	-	-	-	-	-	
P-61B-NO -15,-16,-20,-25	38000	NONE	1880	-	-	-	-	-	-	-	-	-	-	
	31100	NONE	1260	-	-	-	-	-	-	-	-	-	-	
	32100	NONE	970	550	1.8	610	1.8	1130	4.5	1010 C	4.1 C	1350	5.9	
	29700	NONE	640	360	1.2	410	1.3	785	2.7	580	2.2	940	4.2	
	31700	2000	640	-	-	-	-	-	-	-	-	--	-	
	33700	4000	640	-	-	-	-	-	-	-	-	-	-	
COLUMN	35	36	37	38	39	40	41	42	43	44	45	46	47	48

NOTES:

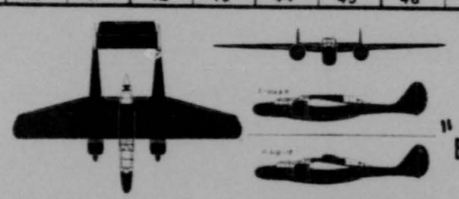
(A) SEVEN OR MORE OF FOLLOWING:

SCR-274	COMMAND SET
SCR-522	COMMAND SET
SCR-695	IFF
SCR-718	RADAR ALTIMETER
SCR-720	RADAR SET IN NOSE
SCR-729	INTERROGATOR
RC-32	FILTER EQUIPMENT
RC-36	INTERPHONE AMPLIFIER
RC-198	FILTER EQUIPMENT
MN-26	RADIO COMPASS
AN/APG-1	GUN LAYING RADAR
AN/APN-1	LOW ALT. ALTIMETER
AN/APS-13	TAIL WARNING RADAR
AN/ARC-3	COMMAND (VHF)
AN/ARN-7	RADIO COMPASS
AN/ASA-3	STATIC DISCHARGE
BC-1206	BEACON RECEIVER

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

TIME TO CLIMB FROM S.L. BASED ON MILITARY POWER.

MANUFACTURED BY NORTHROP (HAWTHORNE) "NO"



P-61

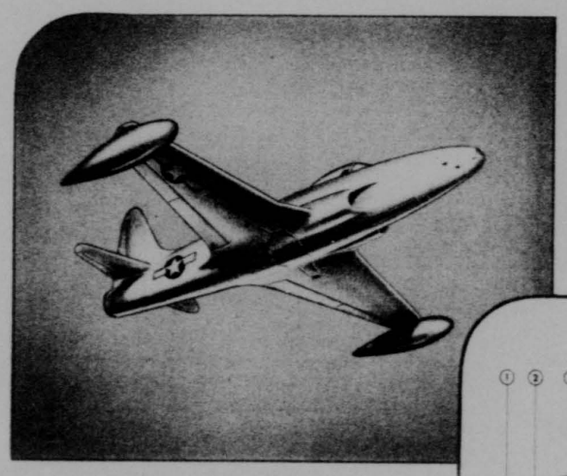
"BLACK WIDOW"

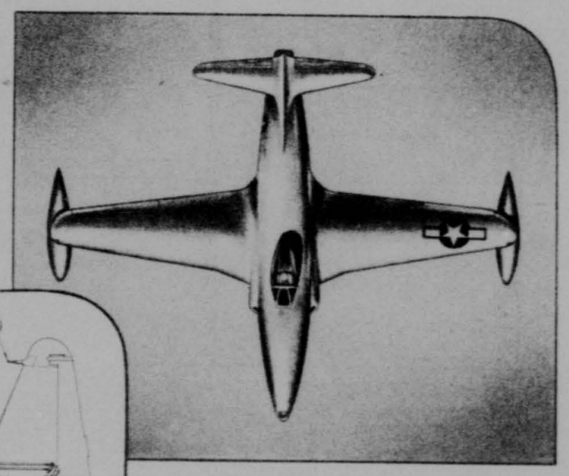
[redacted]

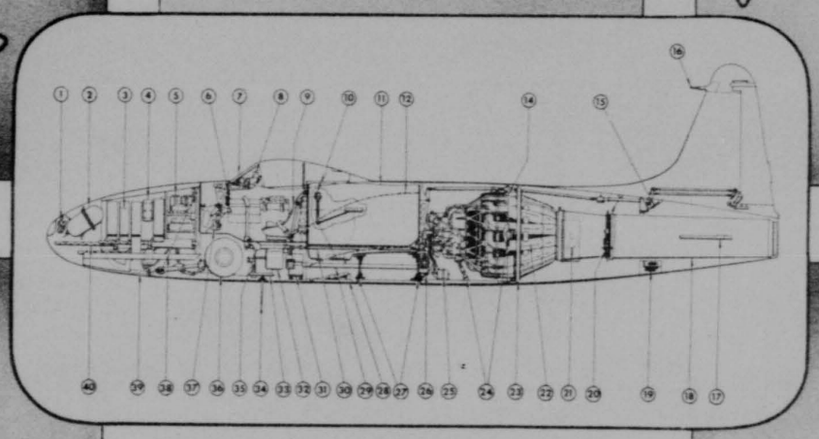
[redacted]

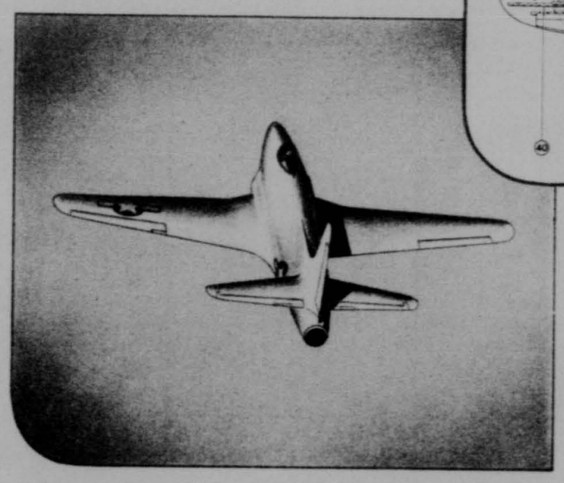
[redacted]

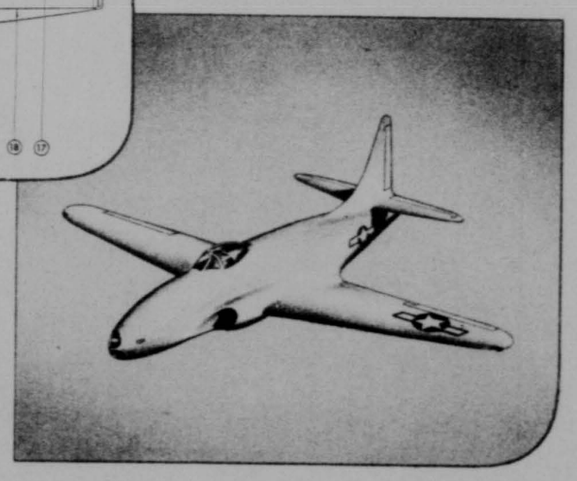
LOCKHEED P-80A
Shooting Star











1. Landing light
2. Oxygen cylinder
3. Ammunition box
4. Armament junction box
5. Command radio
6. Instrument panel
7. Bullet-proof windshield
8. Gun sight
9. Pilot's seat
10. Fuel gage transmitter
11. Main fuel tank
12. Air intake duct
14. Aft fuselage joint
15. Elevator spring
16. Air speed pitot
17. Tail pipe support track
18. Tail pipe
19. Remote compass
20. Tail pipe clamp
21. Elevator tab motor
22. Engine
23. Air intake seal
24. Engine mounts
25. Fuel filter
26. Aileron booster
27. Wing spars
28. Dive flaps
29. Aileron torque tube
30. Elevator push-pull tube
31. Identification radio
32. Electrical junction box
33. Battery
34. Identification radio antenna
35. Elevator-aileron control
36. Nose wheel
37. Rudder pedals
38. Nose section joint
39. Shell case ejection doors
40. Machine guns-.50 cal.

[redacted]

TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART

PAGE 39
AS OF:
29 JUNE 1945.

MODEL & BLOCK NO.	ENGINE NUMBER	ENGINE MFGR. MODEL TYPE	ENGINE % MAX. R.P.M. T-TAKE-OFF M-MILITARY C-CONTINUOUS	SIZE S-SPAN L-LENGTH H-HEIGHT T-TREAD W-WING AREA	WT. B-BASIC C-COMBAT ~~R-RECO.LIM.~~ W-WAR MAX.	COMBAT CREW	FUEL TANK TYPE OR LOCATION	FUEL NO. TANKS & CAPACITY U.S. GAL.	ARMAMENT NO. GUNS & CALIBER	ARMAMENT RDS. PER GUN	ARMAMENT LOCATION & TYPE	BOMBS ~~CARGO PASS.~~ INTERNAL NO. & SIZE ~~OR STATION~~	BOMBS ~~CARGO PASS.~~ EXTERNAL NO. & SIZE ~~OR CAPACITY~~	BOMBS ~~CARGO PASS.~~ MAX. LOAD LB.	RADIO TYPE	REMARKS & REFERENCE
P-80A-LO -1	1	GENERAL ELECTRIC J-33-9 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.'	B 8000 C 11700 ~~R~~ - W -	1	FUSELAGE MAIN-WING L.E.&OUTBD. TROP.-WING	1 x 207 2 x 65 2 x 49 2 x 165 745 TOT.	6- .50 (ROCKETS WILL BE INSTALLED ON 600th. & SUBSEQUENT ARTICLES)	300	NOSE	NONE	2-1000 2- 500 2- 250 2- 100	2000	AN/ARC-3, SCR-695, BC-1206	TECHNICAL ORDER 01-75FJA-1. (25 APRIL 1945) (r) USABLE FUEL IS APPROX. 710 GAL.(DROPPABLE). DUE TO DESIGN CHANGES IN EARLY P-80A-1-LO, INTERNAL FUEL VARIES FROM 425 to 470 GAL. PRODUCTION ARTICLE 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											
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) GROSS WEIGHT LB	TO CLEAR 50' T.O. DIST. FT.	TO CLEAR 50' LAND. DIST. FT.	LANDING SPEED M.P.H.	GROUND-RUN T.O. DIST. FT.	GROUND-RUN LAND. DIST. FT.	HIGH SPEED & CLIMB (AT NORMAL COMBAT WEIGHT) WEIGHT LB	STD. ALT. FT.	WAR EMERG. HIGH SPEED M.P.H.	WAR EMERG. RATE OF CLIMB FT/MIN.	MIL. POWER HIGH SPEED M.P.H.	MIL. POWER RATE OF CLIMB FT/MIN.	MAX. CONTIN. POWER HIGH SPEED M.P.H.	MAX. CONTIN. POWER RATE OF CLIMB FT/MIN.	MAX. CONTIN. POWER TIME TO CLIMB MIN.	RANGE & ENDURANCE (STATUTE AIR MILES - NO WIND - NO ALLOWANCE FOR RESERVE) TAKE OFF WEIGHT LB	BOMBS ~~CARGO PASS.~~ LB	TOTAL FUEL U.S. GAL.	MAX. CONTINUOUS POWER at 25000 RANGE MILES	MAX. CONTINUOUS POWER at 25000 END HRS	MAX. CONTINUOUS POWER at 35000 RANGE MILES	MAX. CONTINUOUS POWER at 35000 END HRS	MAX. RANGE at 25000 RANGE MILES	MAX. RANGE at 25000 END HRS	MAX. RANGE at 35000 RANGE MILES	MAX. RANGE at 35000 END HRS	REMARKS
P-80A-LO -1	8000	-	2900	95	-	1400	11700	40000			492	1160	480	-	-												
								35000			498	1650	488	#	12.3												
								30000			508	2070	500	#	9.5												
								25000			521	2450	510	#	7.4												
	12000	1600	4150	105	3800	2050		20000			533	2860	515	#	5.5												
								15000			542	3270	513	#	3.8												
	14000	6350	-	-	5300	-		10000			548	3700	508	#	2.4												
								5000			554	4130	502	#	1.2												
								SL			556	4560	492	#	0.0												
																14000	NONE	745	995	1.9	1200	2.7	1080	2.7	1300	3.4	
																11700	NONE	435	510	1.1	670	1.4	605	1.5	760	1.9	
																			(SEE NOTE "A" AT BOTTOM)				(SEE NOTE "A" AT BOTTOM)				
COLUMN ——	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45

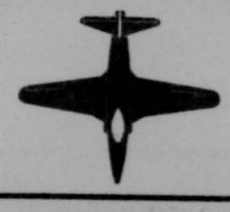
NOTES:

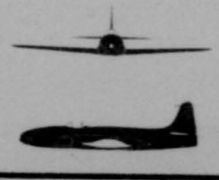
(A) RANGE IS BASED ON 50 GAL. ALLOWANCE FOR TAXI AND TAKE-OFF. CLIMB TO ALTITUDE AT 100% R.P.M. FOR ALLOWABLE TIME.

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

TIME TO CLIMB FROM S.L. BASED ON MILITARY POWER.

MANUFACTURED BY LOCKHEED (Burbank) "LO"



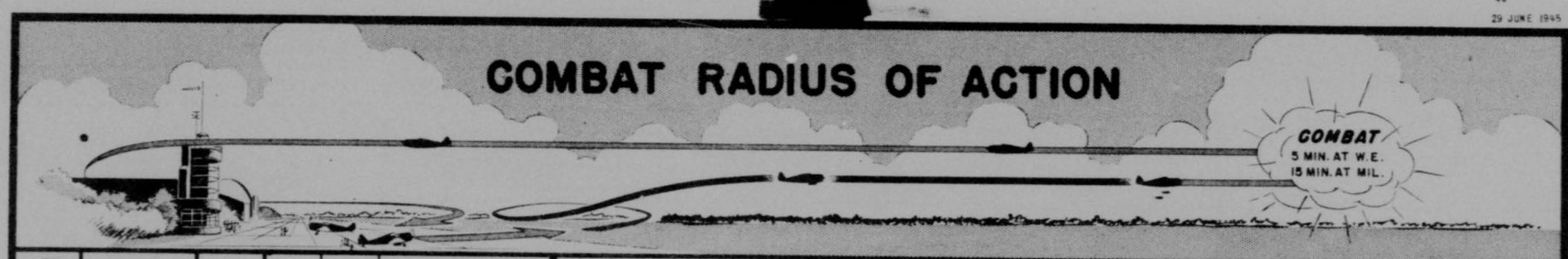


P-80
"SHOOTING STAR"

[redacted]

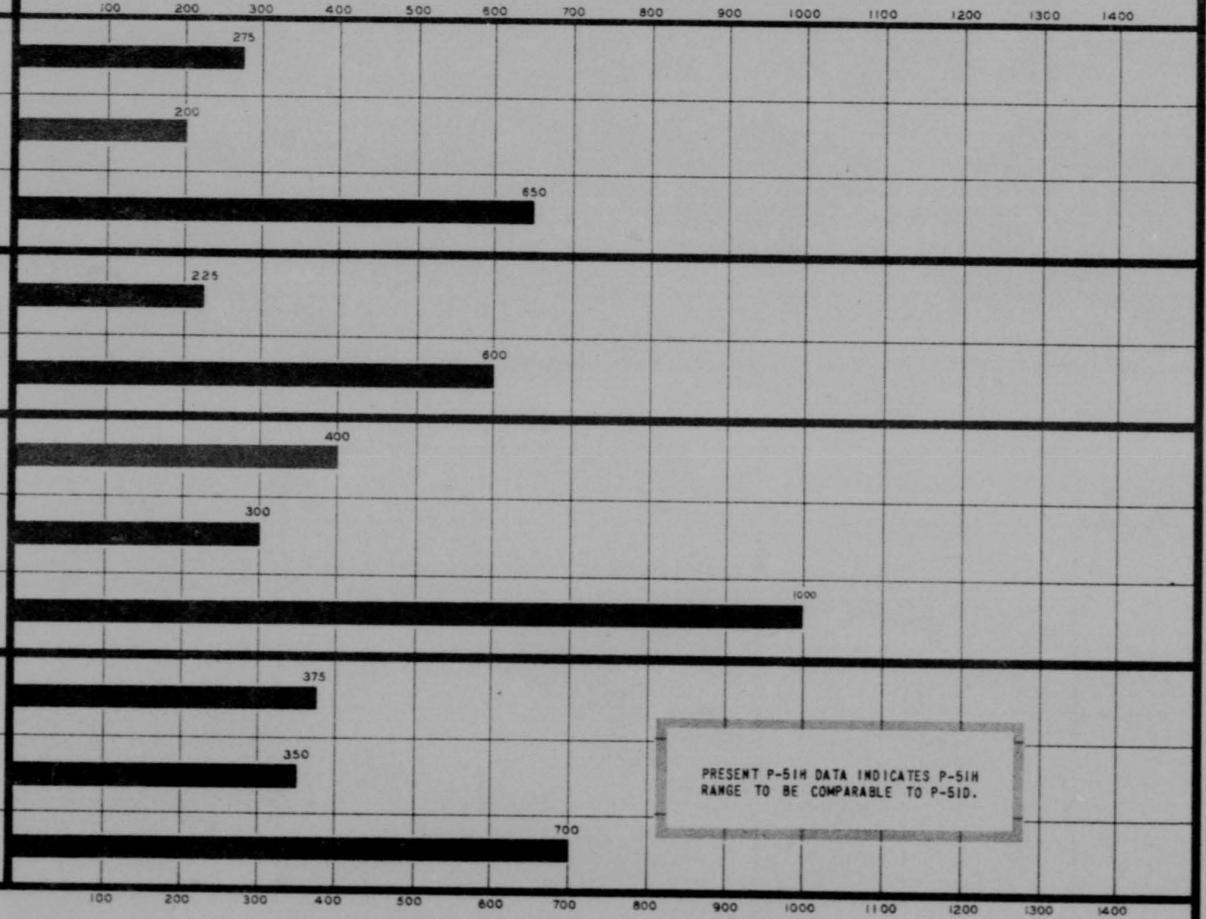
40
29 JUNE 1945

COMBAT RADIUS OF ACTION



MODEL	T.O. WEIGHT LB.	BOMBS LB.	FUEL U.S. GAL. INT.	FUEL U.S. GAL. EXT.	FUEL U.S. GAL. TOT.
P-38J&L	17500	NONE	410	NONE	410
	19500	2000	410	NONE	410
	20200	NONE	410	330	740
P-47D	14500	NONE	370	NONE	370
	16600	NONE	370	300	670
P-47N	16700	NONE	556	NONE	556
	18800	2000	556	NONE	556
	19200	NONE	556	** 440	996
P-51 D&H D	10100	NONE	269	NONE	269
P-51 D&H H	9500	NONE	255	NONE	255
P-51 D&H D	12100	2000	269	NONE	269
P-51 D&H H	11500	2000	255	NONE	255
P-51 D&H D	11100	NONE	269	150	419
P-51 D&H H	11000	NONE	255	220	475

RADIUS 25000 FEET ALTITUDE



PRESENT P-51H DATA INDICATES P-51H RANGE TO BE COMPARABLE TO P-51D.

AS A RESULT OF NUMEROUS REQUESTS FOR RADIUS OF ACTION DATA, THIS PAGE IS OFFERED FOR COMMENT. IT IS FULLY UNDERSTOOD THAT THE DATA SHOWN HERE WILL COVER ONLY A FEW OF THE CONDITIONS ENCOUNTERED IN ACTUAL COMBAT. THE CONDITIONS UPON WHICH THE RADIUS OF ACTION DATA IS BASED WERE ARBITRARILY SET UP BY THE TECH. DATA LAB. FOR THE PURPOSE OF SHOWING THE TYPE OF INFORMATION THAT CAN BE PRESENTED.

ALL COMMENTS AS TO THE SPECIFIC TYPE OF RADIUS OF ACTION DATA DESIRED SHOULD BE FORWARDED IMMEDIATELY TO FLIGHT DATA BRANCH, TECH. DATA LAB., ENGINEERING DIVISION, WRIGHT FIELD, OHIO.

** 440 GAL. EXTERNAL FUEL CONSISTS OF 2-165 GAL. WING TANKS AND 1-110 GAL. BELLY TANK.
WHEN JUST 2-300 GAL. WING TANKS ARE USED THE RADIUS INCREASES ONLY 25 MILES DUE TO DRAG OF LARGER TANKS.

CONDITIONS AND ALLOWANCES

(a) WARM UP AND TAKE OFF EQUIVALENT TO 5 MINUTES AT NORMAL RATED POWER.
(b) CLIMB TO 25,000 FT. AT NORMAL RATED POWER. (DISTANCE COVERED IN CLIMB IS NOT INCLUDED IN RADIUS).
(c) CRUISE OUT AT 25,000 FT. AND 210 I.A.S.
(d) DROP EXTERNAL TANKS AND/OR BOMBS BEFORE ENTERING COMBAT.
(e) COMBAT 5 MINUTES AT WAR EMERGENCY POWER AND 15 MINUTES AT MILITARY POWER.
(f) CRUISE BACK AT 25,000 FT. AND 210 I.A.S.
(g) NO ACCOUNT IS TAKEN OF DECREASED FUEL CONSUMPTION DURING DESCENT.
(h) ALLOWANCE IS MADE FOR 30 MINUTES RESERVE AT MINIMUM CRUISE POWER.
(i) NO ALLOWANCE IS MADE FOR FORMATION FLIGHT OR EVASIVE ACTION OTHER THAN 20 MINUTES COMBAT.

RED INDICATES PRELIMINARY DATA.

[redacted]

TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART

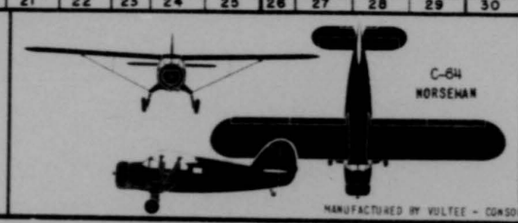
AS OF 29 JUNE 1945

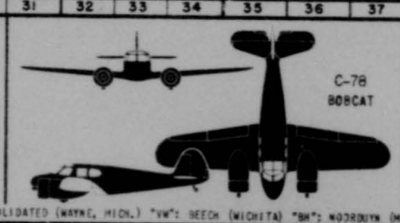
MODEL & BLOCK NO.	ENGINE & PROP. NUMBER	ENGINE MFGR. MODEL SUPERCHARGER PROP. MFGR. TYPE	B.H.P./ALT. T-TAKE OFF W-WAR EMERG. M-MILITARY C-CONTINUOUS	SIZE S-SPAN L-LENGTH H-HEIGHT T-TREAD W-WING AREA	WEIGHT B-BASIC C-COMBAT W-WAR MAX. M-MAX LAND	NOTES	COMBAT CREW	FUEL & OIL FUEL TANKAGE TYPE OR LOCATION ALSO (MAX. OIL.)	FUEL & OIL FUEL TANKAGE NO. AND CAPACITY ALSO (MAX FUEL)	CARGO OR PASSENGERS STATION	CAPACITY	MAX. LOAD LB.	STATION	PLACES	MAX. LOAD LB.	RADIO TYPICAL MODELS CARRIED	REMARKS & REFERENCE
L-5 } L-5B } L-5C } L-5E } L-5E-1 } VW	1	LYCOMING O-435-1 NONE SENSENICH FIXED - WOOD	T 185/ S L W NONE M NONE C 185/ S L	S 34' 0" L 24' 1" H 7' 11" T 7' 5" W 155 Sq. Ft.	B 1550 C 2050 W 2200 M 2200		2	WINGS (3)	2 x 18 (36)	L-5 CAN CARRY PASSENGER OR 200 LBS. BAGGAGE IN LIEU OF OBSERVER. L-5B AND SUBSEQUENT CAN CARRY CASUALTY IN LITTER OR 200 LBS. BAGGAGE IN LIEU OF OBSERVER.						SCR-274-N AVT-112 AVR-20A AM/ARR-13 [b]	L-5 SERIES TECH. ORDER 01-500B-1 (20 MARCH 1945) UC-45F TECH. ORDER 01-90CD-1 (REV. 15 FEB. 1945) UC-64A TECH. ORDER 01-155C8-1 (REV. 25 FEB. 1945) UC-78 SERIES TECH. ORDER 01-125-1 (REV. 20 NOV. 1944) (a) L-5E-1 HAS LARGER WHEELS INCREASING HEIGHT APPROX. 1". (b) BEGINS ON LATE L-5B. (c) EARLY MODELS DID NOT HAVE PROVISIONS FOR LITTERS. (d) A FEW ARTICLES HAD FIXED-PITCH WOOD PROPELLERS.
			T W M C	S L H T W	B C W M												
UC-45F-BH	2	PRATT & WHITNEY R-985-AN-1 or -3 INTEGRAL HAMILTON STD. CONST. SPEED	T 450/ S L W NONE M NONE C 450/ S L	S 47' 8" L 34' 3" H 9' 8" T 12' 11" W 349 Sq. Ft.	B 5800 C 7880 W 8725 M 7850		2	MAIN - WINGS AUX. - WINGS (16)	2 x 78 2 x 25 (206)	N O N E			CABIN	5	1900	SCR-274-N SCR-259G RC-438 RC-36 SCR-695	
UC-64A-ND	1	PRATT & WHITNEY R-1340-AN-1 INTEGRAL HAMILTON STD. CONST. SPEED	T 600/ S L W NONE M NONE C 550/5000	S 51' 6" L 32' 4" H 10' 1" T 9' 1" W 325 Sq. Ft.	B 4800 C 7400 W 8000 M 7400		2	WINGS FRONT BELLY REAR BELLY AUX. - CABIN (20)	2 x 60 1 x 45 1 x 77 1 x 38 (280)	CABIN	1500	1500	CABIN	4 LITTERS [c] or 6 PASS.	1200	SCR-274-N SCR-578 SCR-595 SCR-695 RC-198	
UC-78 } CE UC-78B } CE UC-78C } CE	1	JACOBS R-755-9 NONE HAMILTON STD. CONST. SPEED	T 245/ S L W NONE M NONE C 225/ S L	S 41' 11" L 32' 9" H 9' 11" T 12' 7" W 295 Sq. Ft.	B 4200 C 5700 W 5700 M 5700		2	WINGS AUX. - FUSEL. (10)	2 x 50 1 x 30 (150)	N O N E			CABIN	3	600	SCR-283	
COLUMN 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

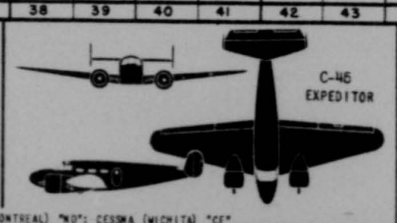
MODEL & BLOCK NO.	TAKE OFF & LANDING HARD SURFACE - NO WIND GROSS WEIGHT LB	TO CLEAR 50' T.O. DIST. FT	TO CLEAR 50' LAND DIST. FT	LANDING SPEED M.P.H.	GROUND RUN T.O. DIST. FT	GROUND RUN LAND DIST. FT	HIGH SPEED & CLIMB CLEAN AIRPLANE AT NORMAL COMBAT WEIGHT WEIGHT LB	STD. ALT. FT	WAR EMERG. HIGH SPEED M.P.H.	WAR EMERG. RATE OF CLIMB FT. MIN.	MIL. POWER HIGH SPEED M.P.H.	MIL. POWER RATE OF CLIMB FT. MIN.	MAX. CONTIN. POWER HIGH SPEED M.P.H.	MAX. CONTIN. POWER RATE OF CLIMB FT. MIN.	MAX. CONTIN. POWER TIME TO CLIMB MIN.	RANGE AND ENDURANCE STATUTE AIR MILES - NO WIND - NO ALLOWANCE FOR RESERVE LOADING TAKE OFF WEIGHT LB	LOADING BOMBS CARGO PASS. LB	LOADING TOTAL FUEL U.S. GAL.	MAX. CONTINUOUS POWER at 5000 FT. RANGE MILES	MAX. CONTINUOUS POWER at 5000 FT. ENDUR. HOURS	MAX. CONTINUOUS POWER at 15,000 FT. RANGE MILES	MAX. CONTINUOUS POWER at 15,000 FT. ENDUR. HOURS	MAX. CRUISE POWER at 5000 FT. RANGE MILES	MAX. CRUISE POWER at 5000 FT. ENDUR. HOURS	MAX. CRUISE POWER at 15,000 FT. RANGE MILES	MAX. CRUISE POWER at 15,000 FT. ENDUR. HOURS	LONG RANGE at 10,000 FT. RANGE MILES	LONG RANGE at 10,000 FT. ENDUR. HOURS	REMARKS
L-5 } L-5B } L-5C } VW	1800 1900 2000 2100 2200	- - 1050 1150 1300	875 925 950 1000 -	- - - 43 -	- - 650 725 800	475 500 525 550 -	2050	15000 10000 5000 S L	NOT APPLICABLE				115 118 122 130	150 400 650 900	35.5 16.0 6.4 0.0	2000 2150 2200	0 200 200	36 25 34	250 150 250	1.9 1.2 1.9	NOT APPLICABLE		380 250 360	3.4 2.2 3.2	NOT APPLICABLE		420 [e] 270 [e] 400 [e]	3.9 2.5 3.7	(e) AT 6000 FT. ALT.
L-5E } L-5E-1 } VW	1800 1900 2000 2100 2200	- - 1000 1100 1225	AS ABOVE	- - - 41 -	- - 600 650 725	AS ABOVE		A S A B O V E					-	-	-			A	S		A	B	O	V	E				
UC-45F-BH	6500 7000 8000 8725	- 1100 1600 2100	1700 1800 1950 -	56 58 62 -	- 800 1100 1400	1200 1250 1400 -	7850	25000 20000 15000 10000 S L	NOT APPLICABLE				188 206 210 215 206	250 550 900 1250 1200	29.0 15.8 8.6 4.1 0.0	7850 8725	0 1000	206 206	500 500	2.4 2.4	470 [f] 470 [f]	2.3 2.3	670 650	3.5 3.4	650 [f] 630 [f]	3.4 3.5	850 750	4.8 4.4	(f) SPECIAL PROVISIONS MUST BE MADE FOR OXYGEN FOR ALTITUDE FLIGHTS.
UC-64A-ND	5500 6000 7000 8000	- 1250 1800 2800	1150 1200 1450 -	- - 64 -	- 675 1100 1700	575 625 750 -	7400	20000 15000 10000 5000 S L	NOT APPLICABLE				- - - - 145	- 200 400 500 600	- 45.0 19.0 9.0 0.0	7400 7400	400 1500	280 120	750 250	5.0 1.7	900 [f] 350 [f]	6.0 2.5	1000 450	7.7 3.5	NOT APPLICABLE		1280 500	10.7 4.2	
UC-78 } CE UC-78B } CE UC-78C } CE	4500 5000 5500 5700	- 1325 1790 2000	- - - -	- - - -	- 525 850 725	- - - -	5700	15000 10000 5000 S L	NOT APPLICABLE				144 161 171 175	220 520 850 950	30.0 15.0 6.0 4.0	5700 5700	400 600	150 120	600 470	3.5 2.8	670 500	2.9 2.3	NOT APPLICABLE				NO DATA		
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

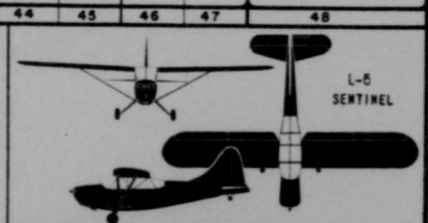
NOTES:

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









MANUFACTURED BY VULTEE - CONSOLIDATED (WAYNE, MICH.) "VW"; BEECH (WICHITA) "BH"; NORDBUYN (MONTREAL) "ND"; CESSNA (WICHITA) "CE"

TACTICAL PLANNING CHARACTERISTICS & PERFORMANCE CHART

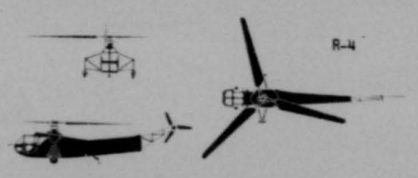
PAGE 42 AS OF 29 JUNE 1945

MODEL & BLOCK NO.	ENGINE & PROP. NUMBER	ENGINE MFGR. MODEL SUPERCHARGER PROP. MFGR. TYPE	B.H.P./ALT. T-TAKE OFF W-WAR EMERG. M-MILITARY C-CONTINUOUS	SIZE D-DISC. DIA. L-LENGTH H-HEIGHT T-TREAD A-DISC. AREA	WEIGHT B-BASIC C-COMBAT W-WAR MAX. M-MAX. LAND.	NOTES	COMBAT CREW	FUEL & OIL FUEL TANKAGE TYPE OR LOCATION ALSO (MAX. OIL)	NO. AND CAPACITY ALSO (MAX. FUEL)	CARGO OR PASSENGERS STATION	CAPACITY	MAX. LOAD LB.	STATION	PLACES	MAX. LOAD LB.	RADIO TYPICAL MODELS CARRIED	REMARKS & REFERENCE
R-4B-S1	1	WARNER R-550-3 NONE NOT APPLICABLE NOT APPLICABLE	T 200/ S L W NONE M NONE C 180/ S L	D 38' 0" L 48' 2" H 12' 5" T 10' 0" A 1134 Sq. Ft.	B 2050 C 2600 W - M -		2	FUSELAGE (3)	1 x 30 (30)	CABIN	1 LITTER (a) & CASUALTY	300	NONE			AVR-20 AVT-112	REFER TO PAGE 4 FOR "FOREWORD." REFER TO PAGE 3 FOR SECURITY CLASSIFICATION. REFER TO PAGE 5 FOR DEFINITIONS. REFER TO T.O. LISTED FOR DETAILED PLANNING. R-4B TECH. ORDER 01-230HA-1 (30 APRIL 1945) (a) THREE 100 LB. BOMBS CAN BE CARRIED IN PLACE OF LITTER.
			T W M C	D L H T A	B C W M												
			T W M C	D L H T A	B C W M												
			T W M C	D L H T A	B C W M												
			T W M C	D L H T A	B C W M												
COLUMN	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18

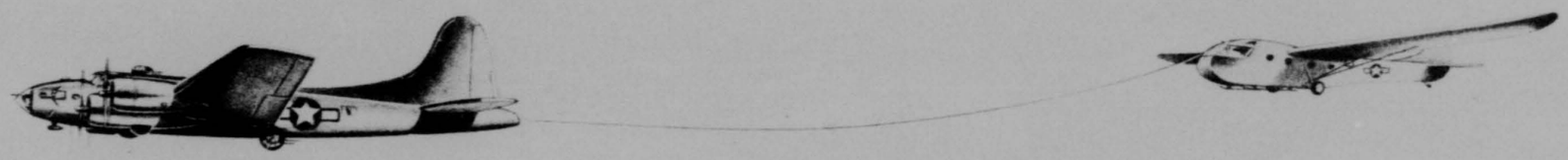
MODEL & BLOCK NO.	TAKE OFF & LANDING (HARD SURFACE - NO WIND) GROSS WEIGHT LB.	TO CLEAR 50' T.O. DIST. FT.	TO CLEAR 50' LAND DIST. FT.	LANDING SPEED M.P.H.	GROUND RUN T.O. DIST. FT.	GROUND RUN LAND DIST. FT.	HIGH SPEED & CLIMB (CLEAN AIRPLANE AT NORMAL COMBAT WEIGHT) WEIGHT LB.	STD. ALT. FT.	WAR EMERG. HIGH SPEED M.P.H.	WAR EMERG. RATE OF CLIMB FT. MIN.	MIL. POWER HIGH SPEED M.P.H.	MIL. POWER RATE OF CLIMB FT. MIN.	MAX. CONTIN. POWER HIGH SPEED M.P.H.	MAX. CONTIN. POWER RATE OF CLIMB FT. MIN.	MAX. CONTIN. POWER TIME TO CLIMB MIN.	RANGE AND ENDURANCE (STATUTE AIR MILES - NO WIND - NO ALLOWANCE FOR RESERVE) LOADING TAKE OFF WEIGHT LB.	LOADING BOMBS CARGO PASS. LB.	LOADING TOTAL FUEL U.S. GAL.	MAX. CONTINUOUS POWER at SEA LEVEL RANGE MILES	MAX. CONTINUOUS POWER at SEA LEVEL ENDUR. HOURS	MAX. CONTINUOUS POWER at 5,000 FT. RANGE MILES	MAX. CONTINUOUS POWER at 5,000 FT. ENDUR. HOURS	MAX. CRUISE POWER at SEA LEVEL RANGE MILES	MAX. CRUISE POWER at SEA LEVEL ENDUR. HOURS	MAX. CRUISE POWER at 5,000 FT. RANGE MILES	MAX. CRUISE POWER at 5,000 FT. ENDUR. HOURS	LONG RANGE at 5,000 FT. RANGE MILES	LONG RANGE at 5,000 FT. ENDUR. HOURS	REMARKS
R-4B-S1	AIRPLANE AND LANDS VERTICALLY.	TAKES OFF					2600	10000 5000 0	NOT APPLICABLE				54 73 82	50 350 700	48.0 10.5 0.0	2650	NONE	30	110	1.4	NO DATA		NOT APPLICABLE		150	1.8	
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

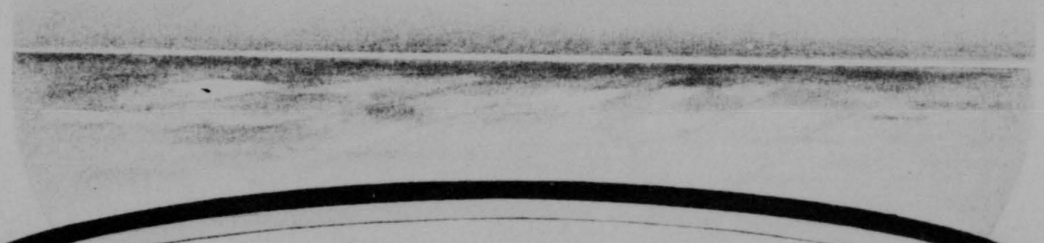
NOTES:

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



MANUFACTURED BY SIKORSKY (STRATFORD, CONN.) "S1"





GLIDER AND TOWPLANE SECTION

JULY - 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 towplanes 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 max. contin. at S.L.)
(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.

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: (AT S.L.) (To clear 50' object)	Distances representative of minimum airport requirements. (No allowance made for tow rope glider length).
Take off speed:	Normal for average pilot. (Towplane I.A.S)
Ground run:	Distances representative of minimum runway requirements. (No allowance made for tow rope glider length.
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.

TYPE OF RELEASE: A number of combinations shown are not eligible for clear releases, for complete information on release characteristics see T.O. 01-1-143, dated 5 Mar. 1945.

RED PRINT: Preliminary estimates or calculated data.

TOWPLANE & GLIDER TACTICAL PLANNING PERFORMANCE CHART

PAGE 45
AS OF:
29 JUNE 1945

BOMBER TOWPLANE AND CG-4A GLIDER

TOWPLANE & GLIDER COMBINATION	LOADING						TAKE OFF (WITH GLIDER ATTACHED) S.L.-HARD SURFACE-NO WIND			CLIMB (AT MINIMUM TOW SPEED)				RANGE & ENDURANCE MAXIMUM STATUTE AIR MILES-NO WIND-NO RESERVE						REMARKS
	GLIDERS		TOWPLANE			MAX. TOW SPEED	TO CLEAR 50' OBJ.	TAKE OFF SPEED	GROUND RUN	I.A.S. FOR CLIMB	INITIAL RATE OF CLIMB	SERVICE CEILING	TIME TO SERVICE CEIL.	RADIUS OF ACTION (GLIDER RELEASED AT RADIUS)			RECOMM. CRUISING ALTITUDE	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)		DISTANCE (FT.)	I.A.S	DISTANCE (FT.)	(M.P.H.)	(FT/MIN)	(FT.)	(MIN.)	RADIUS (MI.)	TIME OUT (HRS.)	TIME BACK (HRS)	(FT.)	RANGE (MI.)	ENDUR. (HRS.)	
B-17F & (1) CG-4A	7500	3800	59100	NONE	2760	150	6000	110	4000	135	300	12000*	37	(990 (980	6.8 6.3	6.0 5.5	5000 10000	1380 1370	9.1 8.8	* LIMITED- NO OXYGEN IN GLIDER
B-17F & (2) CG-4A	7500 7500	3800 3800	52500 59100	NONE NONE	1700 2760	150 150	5750 6600	110 110	3750 4300	135 135	300 240	11000 8000	57 44	510 860	3.4 6.0	3.1 5.2	5000 5000	720 1140	4.8 7.9	NOTE: THE 59100 LB. LOADING WITH (2) GLIDERS IS FOR EMERGENCY RELEASE ONLY.
B-24D & (1) CG-4A	7500 7500	3800 3800	52500 59000	NONE 6000	2344 2344	150 150	3750 4600	115 115	3000 3650	140 140	530 325	12000* 12000*	24 41	(870 (830 780	5.7 5.6 5.0	4.7 4.1 4.2	5000 10000 5000	1360 1280 1200	8.8 7.8 7.7	* LIMITED- NO OXYGEN IN GLIDER
B-25C & (1) CG-4A	7500	3800	30000	2000	972	150	4600	120	3700	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.
COLUMN— 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21

NOTES:

(1) REFERENCE MATERIAL FROM TECHNICAL ORDER 01-1-143 dated 5 MARCH 1945

(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.

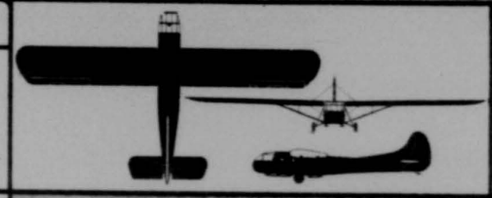
TOW PLANE PERFORMANCE WITH CG-4D TO BE SAME AS WITH CG-4A.

GLIDER CHARACTERISTICS

WEIGHT

B—BASIC
C-COMBAT
W-WAR MAX

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



SIZE

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

S- 83'8"
L- 48'6"
H- 12'7"
T- 9'6"
W- 852 Sq. Ft. (Est.)

TYPICAL GLIDER CAPACITIES

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

TOWPLANE & GLIDER TACTICAL PLANNING PERFORMANCE CHART

PAGE 46
AS OF:
29 JUNE 1945

CARGO TOWPLANE AND CG-4A GLIDER

TOWPLANE & GLIDER COMBINATION	LOADING: GLIDERS TAKE-OFF WEIGHT (LB.)	LOADING: GLIDERS CARGO OR PASS. (LB.)	LOADING: TOWPLANE TAKE-OFF WEIGHT (LB.)	LOADING: TOWPLANE BOMBS CARGO OR PASS. (LB.)	LOADING: TOWPLANE FUEL (U.S. GAL.)	LOADING: MAX. TOW SPEED (M.P.H.)	TAKE OFF (WITH GLIDER ATTACHED) S.L.-HARD SURFACE-NO WIND: TO CLEAR 50' OBJ. DISTANCE (FT.)	TAKE OFF SPEED I.A.S.	TAKE OFF GROUND RUN DISTANCE (FT.)	CLIMB (AT MINIMUM TOW SPEED): I.A.S. FOR CLIMB (M.P.H.)	INITIAL RATE OF CLIMB (FT/MIN.)	SERVICE CEILING (FT.)	TIME TO SERVICE CEIL. (MIN.)	RANGE & ENDURANCE MAXIMUM STATUTE AIR MILES-NO WIND-NO RESERVE: RADIUS OF ACTION (GLIDER RELEASED AT RADIUS) RADIUS (MI.)	RADIUS OF ACTION TIME OUT (HRS.)	RADIUS OF ACTION TIME BACK (HRS.)	RECOMM. CRUISING ALTITUDE (FT.)	MAX. RANGE (WITH GLIDER) RANGE (MI.)	MAX. RANGE (WITH GLIDER) ENDUR. (HRS.)	REMARKS
C-46A & (1)CG-4A	7500 7500	3800 3800	41000 46000	NONE 5000	1400 1400	150 150	2900 3950	85 90	2150 2900	120 120	640 490	12000* 12000*	22 30	770 715	5.2 5.3	4.7 4.3	5000 5000	1255 1115	8.5 8.2	* LIMITED - NO OXYGEN IN GLIDER
C-46A & (2)CG-4A	7500 7500	3800 3800	41000 46000	NONE 5000	1400 1400	150 150	4100 6200	85 90	2950 4200	120 120	330 240	12000* 8700	50 43	605 555	4.5 4.1	3.7 3.4	5000 5000	850 755	6.3 5.7	* LIMITED- NO OXYGEN IN GLIDER. NOTE: THE 46000 LB. LOADING WITH (2) GLIDERS IS FOR EMERGENCY RELEASE ONLY.
C-47,47A&53 (PADDLE BLADE PROPS) & (1)CG-4A	7500 7500 7500	3800 3800 3800	26000 29000 31000	3000 6000 8000	804 804 804	150 150 150	1150 1900 5450	80 85 85	2550 2750 2950	105 105 105	515 410 350	12000* 11300 10400	31 37 39	575 545 520	4.8 4.6 4.4	3.6 3.4 3.1	5000 5000 5000	955 870 820	7.9 7.3 6.9	*LIMITED- NO OXYGEN IN GLIDER.
C-47, 47A & 53 (PADDLE BLADE PROPS) & (1) CG-4A (TOWPLANE EQUIPPED WITH PARA-PACK RACKS)	7500 7500	3800 3800	26000 29000	3000 6000	804 804	150 150	1280 5550	80 80	2650 2900	105 105	465 370	11800 10600	35 38	525 485	4.4 4.1	3.6 3.4	5000 5000	870 830	7.3 6.9	
C-47,47A&53 (PADDLE BLADE PROPS) & (2) CG-4A	7500 7500	3800 3800	24200# 26000#	1200 3000	804 804	150 150	5700 6380	80 80	3050 3250	105 105	220 180	7800 7300	46 50	450 435	4.0 3.8	2.8 2.7	2000 2000	665 630	5.8 5.5	# LOADINGS SHOWN ARE FOR EMERGENCY RELEASE ONLY.
COLUMN—	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21

NOTES:

(1) REFERENCE MATERIAL FROM TECHNICAL ORDER 01-1-143 dated 5 MARCH 1945

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

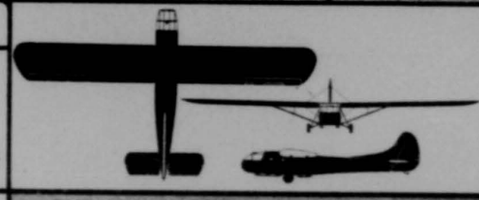
TOW PLANE PERFORMANCE WITH CG-4B TO BE SAME AS WITH CG-4A

GLIDER CHARACTERISTICS

WEIGHT

B—BASIC
C-COMBAT
W-WAR MAX.

B- (3700 lbs / 4600 lbs)
C- 7500
W- 9000



SIZE

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

S- 83'6"
L- 48'4"
H- 12'7"
T- 9'4"
W- (Tot. gear) 852 SQ. FT.

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(28 RDS.)

TOWPLANE & GLIDER TACTICAL PLANNING PERFORMANCE CHART

AS OF: 29 JUNE 1945

FIGHTER TOWPLANE AND CG-4A GLIDER

TOWPLANE & GLIDER COMBINATION	LOADING						TAKE OFF (WITH GLIDER ATTACHED) S.L.-HARD SURFACE-NO WIND			CLIMB (AT MINIMUM TOW SPEED)				RANGE & ENDURANCE MAXIMUM STATUTE AIR MILES-NO WIND-NO RESERVE						REMARKS
	GLIDERS		TOWPLANE			MAX. TOW SPEED	TO CLEAR 50' OBJ.	TAKE OFF SPEED	GROUND RUN	I.A.S. FOR CLIMB	INITIAL RATE OF CLIMB	SERVICE CEILING	TIME TO SERVICE CEIL.	RADIUS OF ACTION (GLIDER RELEASED AT RADIUS)			RECOMM. CRUISING ALTITUDE	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.)	(M.P.H.)	DISTANCE (FT.)	I.A.S.	DISTANCE (FT.)	(M.P.H.)	(FT/MIN)	(FT.)	(MIN.)	RADIUS (MI.)	TIME OUT (HRS.)	TIME BACK (HRS.)	(FT.)	RANGE (MI.)	ENDUR. (HRS.)	
P-38G & (1) CG-4A	7500	3800	15500	NONE	300	150	3500	100	2750	120	1000	12000*	15	270	1.9	1.4	5000	400	2.9	* LIMITED- NO OXYGEN IN GLIDER; SERVICE CEILING OF 20000 FT. CAN BE REACHED IN 40 MINUTES IF OXYGEN IS INSTALLED IN GLIDER. NOTE: LOADINGS SHOWN ARE FOR PROVISIONAL RELEASE ONLY.
COLUMN—	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21

NOTES:

(1) REFERENCE MATERIAL FROM TECHNICAL ORDER 01-1-113 dated 5 MARCH 1945

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

MINIMUM OF 200 LB. BALLAST IS REQUIRED IN NOSE OF P-38G WHEN NO AMMUNITION IS CARRIED.

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

GLIDER CHARACTERISTICS

WEIGHT

B—BASIC
C-COMBAT
W-WAR MAX

B- (3700 to 4600)
C- 7500
W- 9000

SIZE

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

S- 83'8"
L- 48'4"
H- 12'7"
T- 9'4"
W- (Part-Span) 652 Sq. Ft.

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(16 RDS.)

TOWPLANE & GLIDER TACTICAL PLANNING PERFORMANCE CHART

PAGE 48
AS OF:
29 JUNE 1945

CARGO TOWPLANE AND CG-13A GLIDER

TOWPLANE & GLIDER COMBINATION	LOADING: GLIDERS TAKE-OFF WEIGHT (LB.)	LOADING: GLIDERS CARGO OR PASS. (LB.)	LOADING: TOWPLANE TAKE-OFF WEIGHT (LB.)	LOADING: TOWPLANE BOMBS CARGO OR PASS. (LB.)	LOADING: TOWPLANE FUEL (U.S. GAL)	MAX. TOW SPEED (M.P.H.)	TAKE OFF (WITH GLIDER ATTACHED) S.L.-HARD SURFACE-NO WIND: TO CLEAR 50' OBJ. DISTANCE (FT.)	TAKE OFF SPEED I.A.S.	GROUND RUN DISTANCE (FT.)	CLIMB (AT MINIMUM TOW SPEED): I.A.S. FOR CLIMB (M.P.H.)	INITIAL RATE OF CLIMB (FT/MIN)	SERVICE CEILING (FT.)	TIME TO SERVICE CEIL. (MIN.)	RANGE & ENDURANCE MAXIMUM STATUTE AIR MILES-NO WIND-NO RESERVE: RADIUS OF ACTION (GLIDER RELEASED AT RADIUS) RADIUS (MI.)	TIME OUT (HRS.)	TIME BACK (HRS)	RECOMM. CRUISING ALTITUDE (FT.)	MAX. RANGE (WITH GLIDER) RANGE (MI.)	ENDUR. (HRS.)	REMARKS
C-47,47A&53 PADDLE BLADE PROPS. & (1) CG-13A	10000	1300	21200	1200	804	195	4100	85	2600	105	460	12000*	36	555	4.8	3.6	2000	855	7.4	* LIMITED - NO OXYGEN IN GLIDER.
	15700	7000	21200	1200	804	195	5150	90	3100	105	300	9500	41	485	4.2	3.2	2000	725	6.3	
	17700/	9000	21200	1200	804	195	5850	90	3550	105	245	8500	45	460	4.0	3.0	2000	675	5.9	/ LOADING OF 17700 LB. IS FOR EMERGENCY RELEASE ONLY.
C-46A & (1) CG-13A	10000	1300	41000	NONE	1400	195	3950	85	2750	120	465	12000*	29	700	5.2	4.2	5000	1095	8.1	* LIMITED - NO OXYGEN IN GLIDER.
	18900	10200	41000	NONE	1400	195	4650	90	3250	120	320	12000*	45	610	4.6	3.7	5000	895	6.7	
COLUMN—	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21

NOTES:

(1) REFERENCE MATERIAL FROM TECHNICAL ORDER 01-1-143 dated 5 MARCH 1945

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

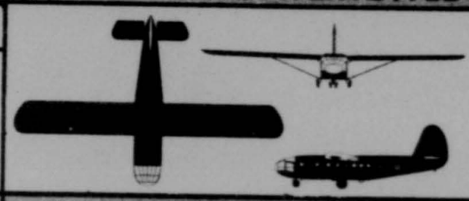
ATTENTION: WEIGHT OF GLIDER MAY BE LIMITED BY TOWPLANE PERFORMANCE; SEE T.O. 01-1-143 DEC. 1944 FOR ALLOWABLE GLIDER WEIGHT WITH CORRESPONDING TOWPLANE.

(A) TYPICAL GLIDER CONDITIONS

(a) JEEPS(2) & TROOPS(8) & CREW (2)
(b) JEEP (1) & TROOPS(8) & CREW (2) & 75mm. HOWITZER (1) & AMMUNITION (156 RDS.)
(c) TROOPS (8) & CREW (2) & 75mm. HOWITZER (2) & AMMUNITION (165 RDS.)
(d) TROOPS (8) & CREW (2) & STD. 105mm. HOWITZER(1) (M-2) & AMMUNITION (63 RDS.)
(e) TROOPS (40) & 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	B- 8700	S— SPAN	S- 85' 7"
C-COMBAT	C- 18900	L—LENGTH	L- 54' 3"
W-WAR MAX	W- 18900	H—HEIGHT	H- 20' 3"
		T—TREAD	T- 9'11"
		W-WING AREA	W- 873 SQ.'



TYPICAL GLIDER CAPACITIES

SEE NOTE "A" AT LEFT

TOWPLANE & GLIDER TACTICAL PLANNING PERFORMANCE CHART

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	TO CLEAR 50' OBJ.	TAKE OFF SPEED	GROUND RUN	I.A.S. FOR CLIMB	INITIAL RATE OF CLIMB	SERVICE CEILING	TIME TO SERVICE CEIL.	RADIUS OF ACTION (GLIDER RELEASED AT RADIUS)			RECOMM. CRUISING ALTITUDE	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.)	(M.P.H.)	DISTANCE (FT.)	(I.A.S.)	DISTANCE (FT.)	(M.P.H.)	(FT/MIN)	(FT.)	(MIN.)	RADIUS (MI.)	TIME OUT (HRS.)	TIME BACK (HRS.)	(FT.)	RANGE (MI.)	ENDUR. (HRS.)	
C-47 47A&53 PADDLE BLADE PROPS & (1) CG-15A	8000	3950	26000	3000	804	150	4100	80	2700	105	485	*12000	37	555	4.4	3.8	5000	850	6.8	* LIMITED - NO OXYGEN IN GLIDER.
	8000	3950	29000	6000	804	150	5150	85	3200	105	365	10500	45	520	4.2	3.5	5000	775	6:2	
	8000	3950	31000	8000	804	150	5700	85	3600	105	320	9500	45	490	3.9	3.3	5000	720	5.7	
C-46A & (1) CG-15A	8000	3950	41000	NONE	1400	150	3400	85	2400	120	620	12000*	23	755	5.3	4.6	5000	1215	8.4	* LIMITED - NO OXYGEN IN GLIDER.
	8000	3950	46000	5000	1400	150	4550	90	3200	120	480	12000*	30	715	5.3	4.3	5000	1115	8.3	

COLUMN— 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21

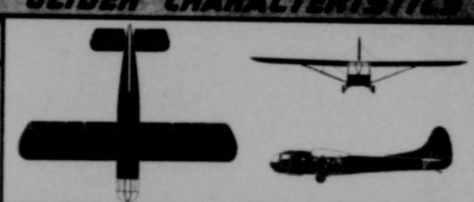
NOTES:

(1) REFERENCE MATERIAL FROM TECHNICAL ORDER 01-1-143, DATED 5 MARCH 1945

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

GLIDER CHARACTERISTICS

WEIGHT		SIZE	
B—BASIC	B- 4050	S — SPAN	S- 62'3"
C-COMBAT	C- 8000	L—LENGTH	L- 48'9"
W-WAR MAX.	W- 9000	H—HEIGHT	H- 12'7"
		T—TREAD	T- -
		W-WING AREA	W- 556 SQ.'



TYPICAL GLIDER CAPACITIES

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

COMMENTS
ON EE-393

Several months ago a questionnaire was inserted in these pages. The response was, on the whole, gratifying. Quite a few bouquets (and some brickbats) showed up in the mail, together with many useful suggestions which have kept our staff busy.

★

Data on jet aircraft have been requested; the P-80 is our sole operational type in this category since the P-59 has reverted to training status.

★

Quite a few requests were made for information on proposed tactical aircraft and aircraft under development. Characteristics and performance of aircraft under development are usually classified secret; the inclusion of such data would severely restrict the availability of the Chart. Not all experimental items are carried through to the production stage and it would be wasteful of time and space to include such items before they are winnowed out. As soon as a type is declassified from secret and seems likely to be produced in quantity, it is introduced in the Chart.

★

Some requests have been made for more pictures and drawings, apparently with the intention of using them for recognition purposed. The authorized scope of the Charts does not include the function of recognition. Recognition training aids are available from Training Aids Division, 1 Park Ave., New York City, N.Y.

★

Numerous requests were made for various detailed items of performance and characteristics, such as range of multi-engine aircraft with one or more engines inoperative, type of fuel tanks installed in aircraft, turning radii, cruising speeds of aircraft, etc. It would undoubtedly be desirable to present every available bit of information for every airplane, domestic and foreign; but the obstacles to this procedure are obvious. The contents of the Chart have therefore been confined to items serving Tactical Planning purposes. Details of operation such as cruising speeds, and range with one or more engines inoperative and descriptions of the various aircraft may be obtained from the Technical Orders referenced in the Chart. Performance data in the Chart is based on Technical Order figures substantiated where necessary by flight tests. In some cases the Chart is based on pending Technical Order changes, thus giving a semblance of dissimilarity between current Charts and Technical Orders.

★

The question of Theater practice has been brought out. Every effort has been made to keep the Chart in line with Theater practice. Returnees have been interviewed, Theater reports have been scanned, and personnel have been placed on T.D. in the Theaters. Very little data is available on the effect of formation flight on the range of aircraft. All pertinent information is sought, and it is suggested that persons or agencies having suggestions, forward them to this office.

★

CONFIDENTIAL
HEADQUARTERS
EIGHTH AIR FORCE
AAF STATION 101, APO 634
NEW YORK, N.Y.

TO: Director, Air Technical Service Command, Wright Field, Dayton, Ohio. Attention: TSEAL-50.

DATE: 10 March 1945

SUBJECT: Distribution of Report EE-393.

1. In justification of the continued distribution of 50 (copies) of subject report to (Give complete mailing address)

Commanding General
Hqs. Eighth Air Force
AAF Station 101, APO 634
c/o Director of Intelligence

a. The following use is made of the subject report:

(1) Constantly used by pilots, technical personnel and Intell.

(2) Report contains only authoritative information available on new models

(3) Used for reference & statistical purposes in Flight Operation

b. Comments for improving the value of this report: Within the limits of security include data on jet-propelled a/c. Including flying bombs and similar developmental a/c

(Continue on reverse side if necessary)

Signature
Rank
Official