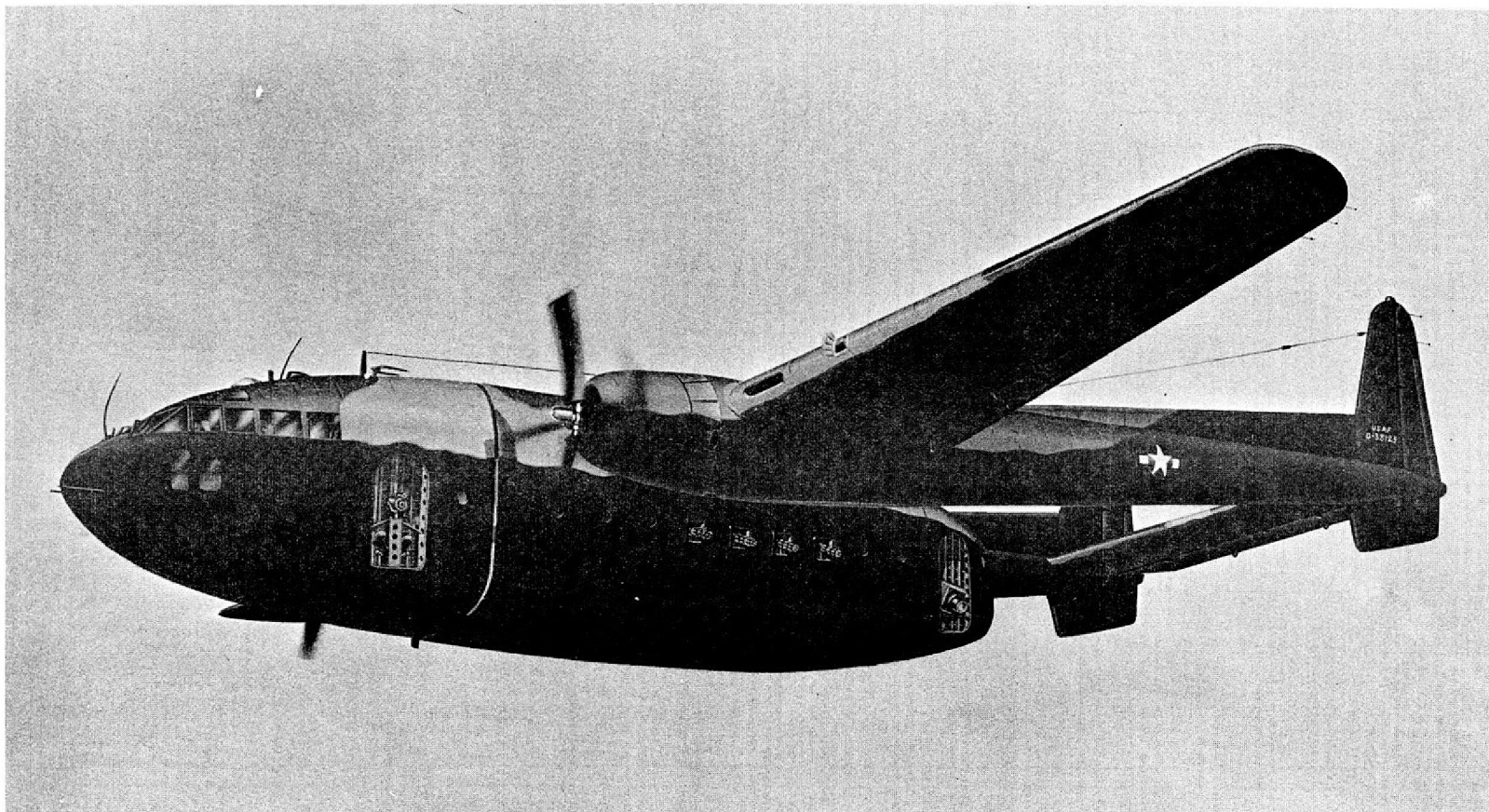




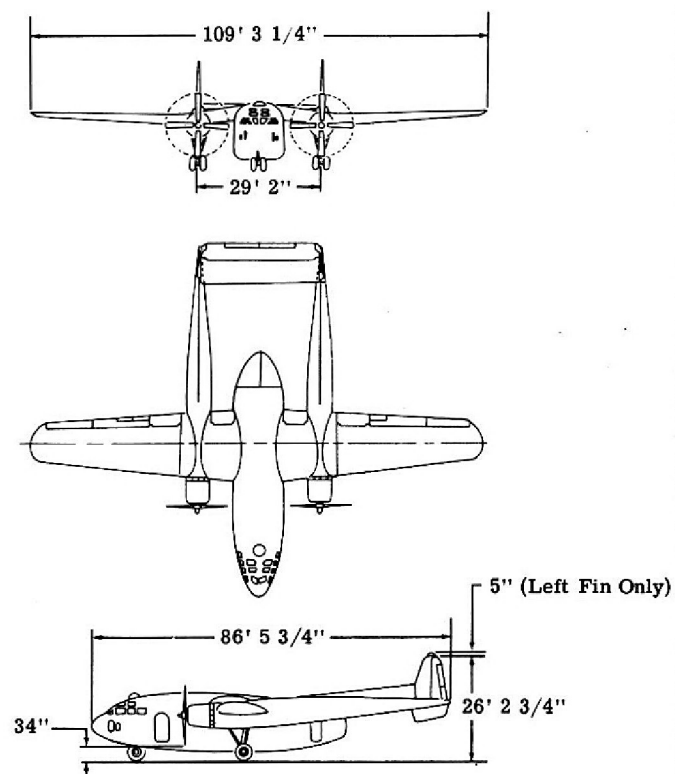
THIS PUBLICATION REPLACES STANDARD AIRCRAFT CHARACTERISTICS DATED 15 MAY 1968

Standard Aircraft Characteristics

BY AUTHORITY OF
THE SECRETARY
OF THE AIR FORCE

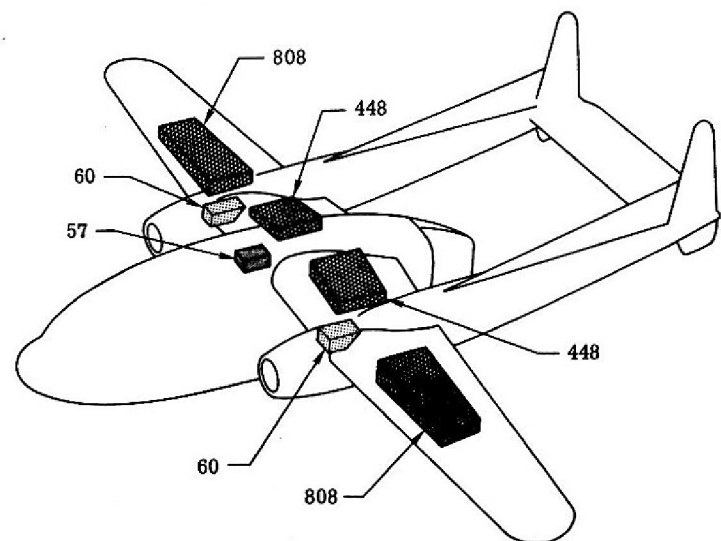
AC-119G
AIRCRAFT
FAIRCHILD HILLER

TWO R-3350-89B
WRIGHT

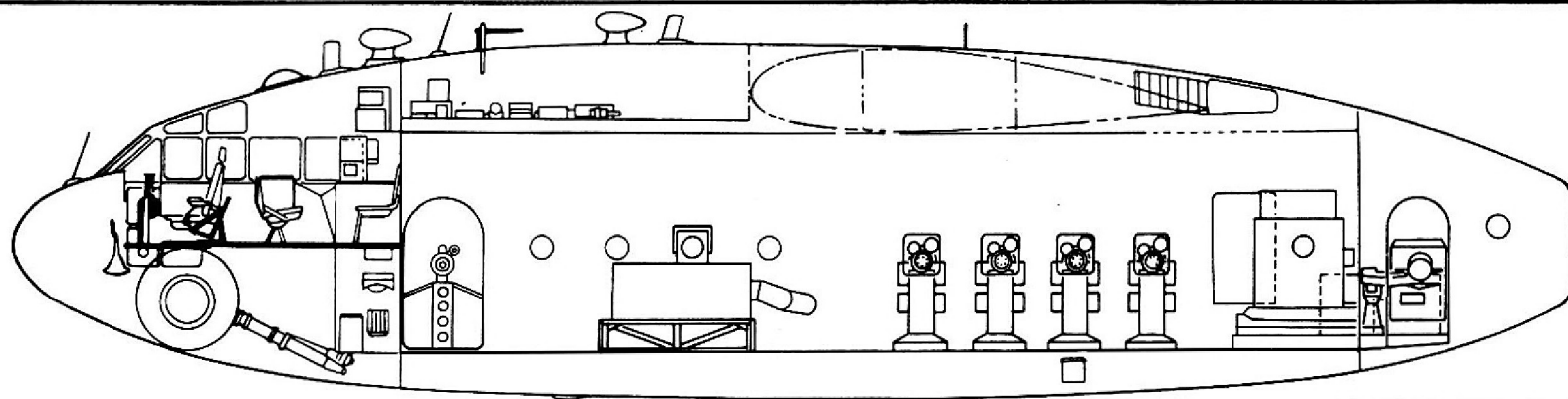


Wing Area. 1447.2 sq ft
 Aspect Ratio 8.25
 M. A. C 168.3 in.

Wing Section
 (root) NACA 2418
 (tip) NACA 4409



■ Fuel (Gal Usable) ■ Water Alcohol (Gal) ■ Oil (Gal)



POWER PLANT

Nr & Model. (2) R-3350-89B
 Mfr Curtiss Wright
 Engine Spec. Nr 868C
 Superch. 1 stg. 2 spd
 Red Gear Ratio. 0.4375
 Prop Mfr Aeroproducts
 Blade Design Nr F40K1-198-18M2
 Prop Type F.F., C.S., Revr
 Nr Blades 4
 Prop Dia 15'0"
 Augmentation. Water/Alcohol

ENGINE RATINGS

BHP- RPM- ALT- MIN

T.O.: ++ 3500 - 2900 - S.L. - 5
 ++ 3500 - 2900 - 4500 - 5
 + 3250 - 2900 - S.L. - 5
 + 3250 - 2900 - 4100 - 5
 METO: + 2600 - 2600 - S.L. - Cont
 + 2650 - 2600 - 6500 - Cont
 ++ 2450 - 2600 - 17,700 - Cont

+ Low Blower ++ High Blower *Wet

DIMENSIONS

Wing
 Span 109' 3 1/4"
 Incidence (root) 3°
 (tip) -1°
 Dihedral (C.S. @ 40% chord) -7°46'
 (O.S. @ 40% chord) 1°30'
 Sweepback (LE) 3°51'
 Length 86' 5 3/4"
 Height 26' 7 3/4"
 Tread 29' 2"
 Prop Grd Clearance 34"
 Fuselage Grd Clearance 24"

Mission and Description

The principal mission of the AC-119G is to provide accurate, all weather, side firing weapons delivery.

The AC-119G is a twin-engine aircraft having a tricycle type landing gear. Twin booms extending back from the engine nacelles support the empennage.

The AC-119G is a modified C-119G transport. Modification includes installation of four 7.62MM side firing machine gun units. The units incorporate either the module configuration, MXU-470/A or pod configuration, SUU-11A/A or SUU-11B/A. Included in the modification is the installation of a LAU-74/A Flare Launcher, Fire Control Computer, Fire Control Display, Lead Computing Optical Gunsight, Night Observation Sight, Illuminator, and additional navigation and communication equipment.

Development

Development of AC-119G series

First Flight. May 1968
 Last Aircraft Delivered 22 November 1969

WEIGHTS

Loading	Lb
Empty	47,981
Basic	54,406
Design	64,000
Combat	58,793
Max. T.O. (Max. Fuel)	69,478
Max. T.O.	65,600
Max. Land	+80,400

+ Limited by taxi and ground handling conditions on landing gear & nacelle structure.

FUEL

Location	Nr Tanks	Gal.
Wg, outbd* 2		1616
Wg, inbd* 2		896
Total (usable)		2512
Grade		115/145
Specification		MIL-G-5572

OIL

Nacelles* 2		120
Total		120
Grade		1100
Specification		MIL-L-22581

WATER/ALCOHOL

Wg, ctr 1		57
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* Self-Sealing

ARMAMENT

Module, MXU-470/A
 7.62 MM Gun (4)
 or
 Pod, SUU-11A/A or SUU-11B/A
 7.62 MM Gun (4)
 Ammunition 33,000 Rnds
 LAU-74/A Flare Launcher
 Flare Launcher Capacity 24 Flares
 Fire Control Computer
 Fire Control Display
 Lead Computing Optical Gunsight
 Night Observation Sight (NOS)
 Illuminator

PERSONNEL

Crew (normal) 8
 Pilot
 Copilot
 Navigator/Safety Officer
 Flight Engineer
 NOS Operator
 Illuminator Operator
 Gunners (2)

ELECTRONICS

UHF Command . AN/ARC-27, AN/ARC-136
 VHF Command Wilcox 807A
 FM FM-622A (2)
 Liaison Collins 618T-3
 Loran AN/APN-70
 Radio Compass AN/ARN-6
 Omni-Range AN/ARN-14
 Glide Slope AN/ARN-18
 Interphone AN/AIC-10
 Marker Beacon AN/ARN-12
 IFF AN/APX-25
 Direction Finder AN/ARA-25
 UHF Ranging AN/ARQ-25
 Tacan AN/ARN-21
 Speech Encryption TSEC/KY-8

Loading and Performance—Typical Mission

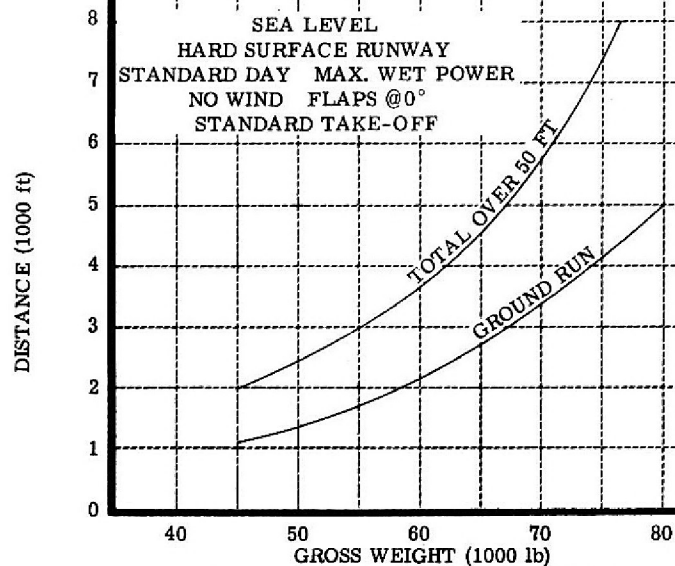
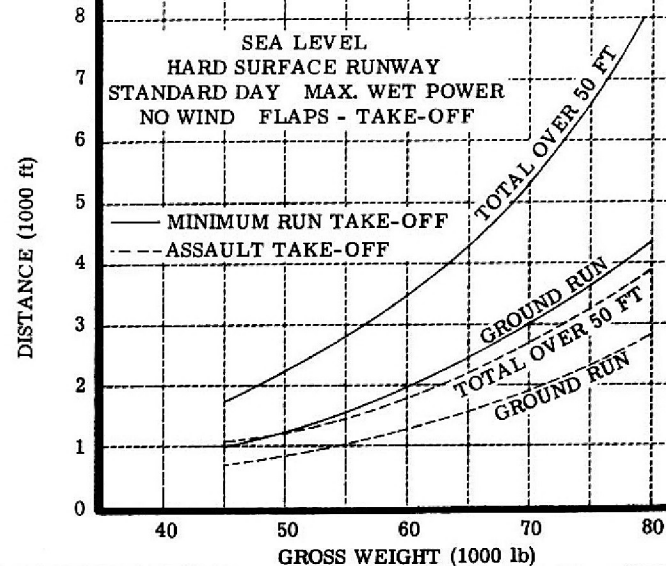
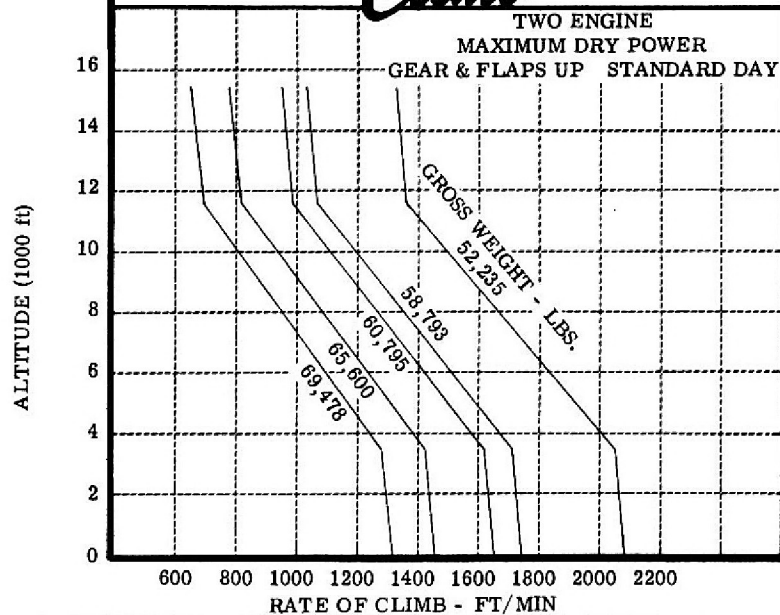
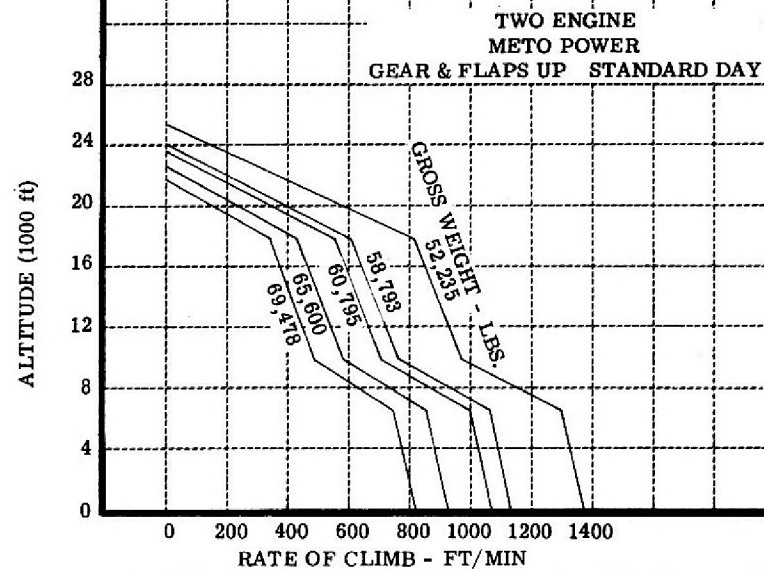
C O N D I T I O N S				BASIC MISSION	MAX FUEL MISSION	FERRY RANGE
TAKE-OFF WEIGHT (lb)				65,600	69,478	65,600
Fuel at 6.0 lbs/gal. (grade 115/145) (lb)				11,194	15,072	14,374
Ammunition and Flares (lb)				3180	3180	-
Wing Loading (lb/sq ft)				45.33	48.01	45.33
Stall Speed (Power Off) ⑥ (kn)				90	93	90
T. O. Ground Run at S. L. ① ④ ⑤ ⑦ (ft)				2530/1660	2950/1930	2530/1660
T. O. to Clear 50 ft ① ④ ⑤ ⑦ (ft)				4470/2280	5280/2650	4470/2280
Rate of Climb at S. L. ② (fpm)				1460	1320	1460
Rate of Climb at S. L. (one eng out) ① (fpm)				183	113	183
Time: S. L. to 10,000 ft ③ (min)				12.0	13.7	12.0
Time: S. L. to 20,000 ft ③ (min)				33.0	39.8	33.0
Service Ceiling (100 fpm) ③ (ft)				21,500	20,500	21,500
Service Ceiling (one eng out) ① (ft)				4940	900	4940
COMBAT MISSION RANGE ⑧ (n mi)				1708	-	1708
Average Mission Speed (kn)				151	-	151
Cruise Altitude (ft)				5000	-	5000
Total Mission Time (hr)				11.30	-	11.30
COMBAT RADIUS (n mi)				100	100	-
Average Assault Speed (kn)				115	117	-
Assault Altitude (ft)				5000	5000	-
Assault Time Over Targets (hr)				8.61	11.96	-
Assault Distance Over Target (n mi)				988	1397	-
Total Mission Distance (n mi)				1188	1597	-
Total Mission Time (hr)				9.94	13.28	-
COMBAT WEIGHT (lb)				58,793	60,795	52,235
Combat Altitude (ft)				5000	5000	5000
Combat Speed ② (kn)				234	233	236
Combat Climb ② (fpm)				1594	1503	1925
Combat Ceiling (500 fpm) ③ (ft)				18,900	18,270	20,680
Service Ceiling (100 fpm) ③ (ft)				23,000	22,530	24,400
Service Ceiling (one eng out) ① (ft)				7920	7000	11,540
Max. Rate of Climb S. L. ② (fpm)				1745	1655	2083
Basic Speed at 5000 ft ② (kn)				234	233	236
LANDING WEIGHT (lb)				52,949	53,144	52,235
Ground Roll at S. L. ⑥ ⑦ (ft)				1742	1747	1720
Ground Roll (reverse thrust) ⑥ ⑦ (ft)				1408	1418	1390
Total over 50 ft ⑥ ⑦ (ft)				2577	2585	2545
Total over 50 ft (reverse thrust) ⑥ ⑦ (ft)				2247	2256	2220

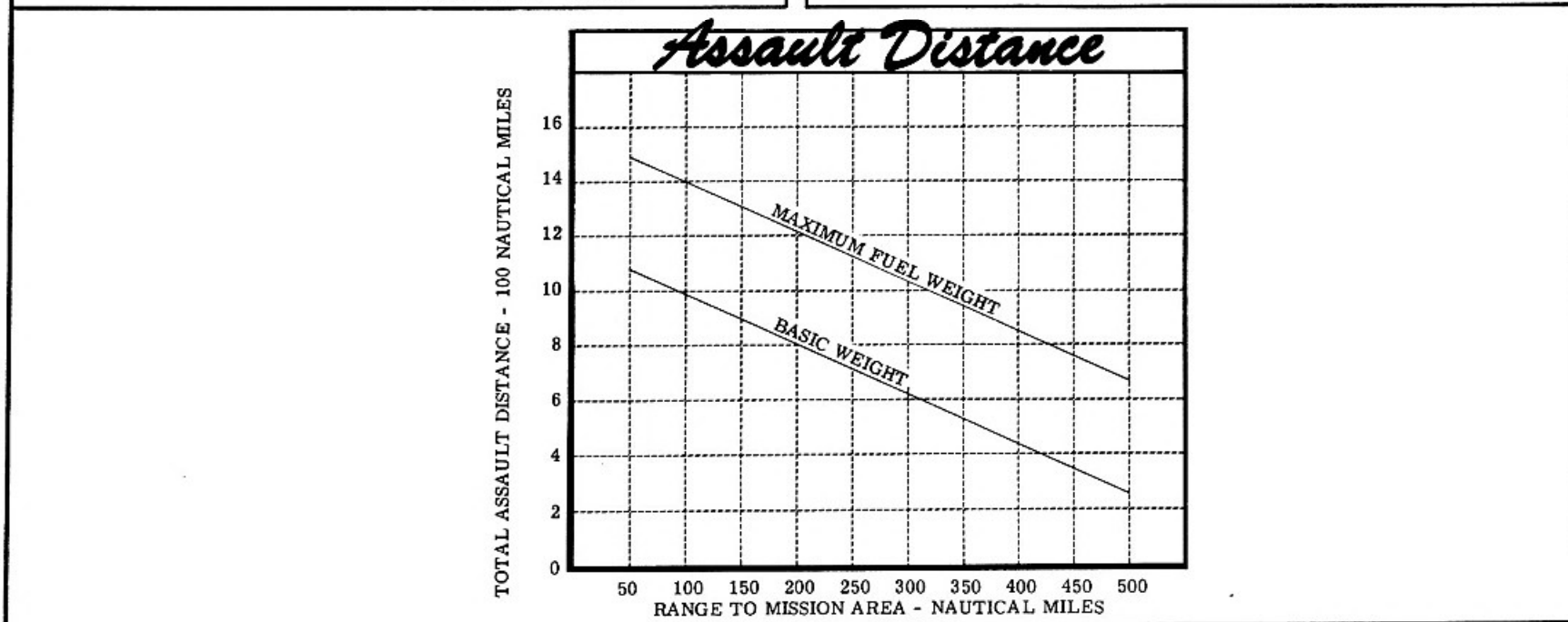
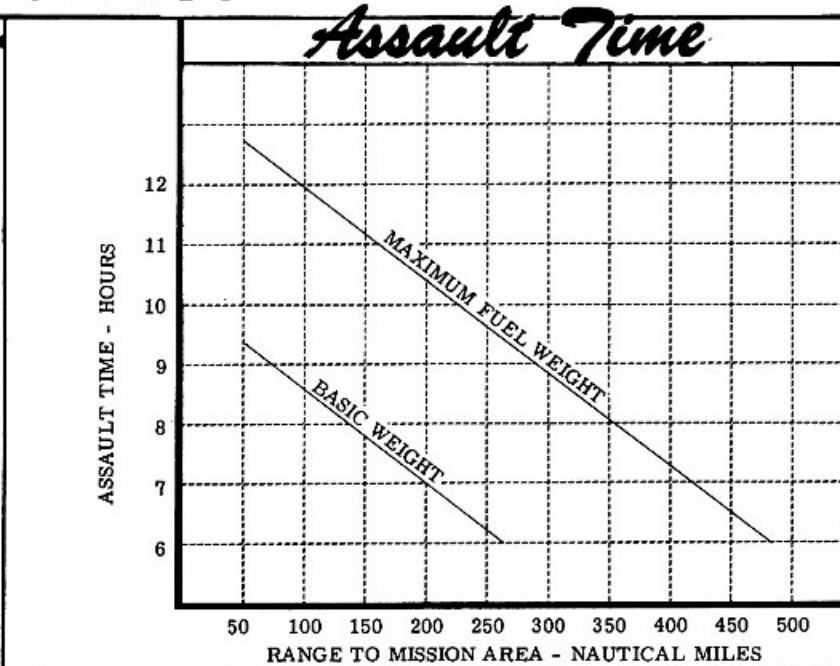
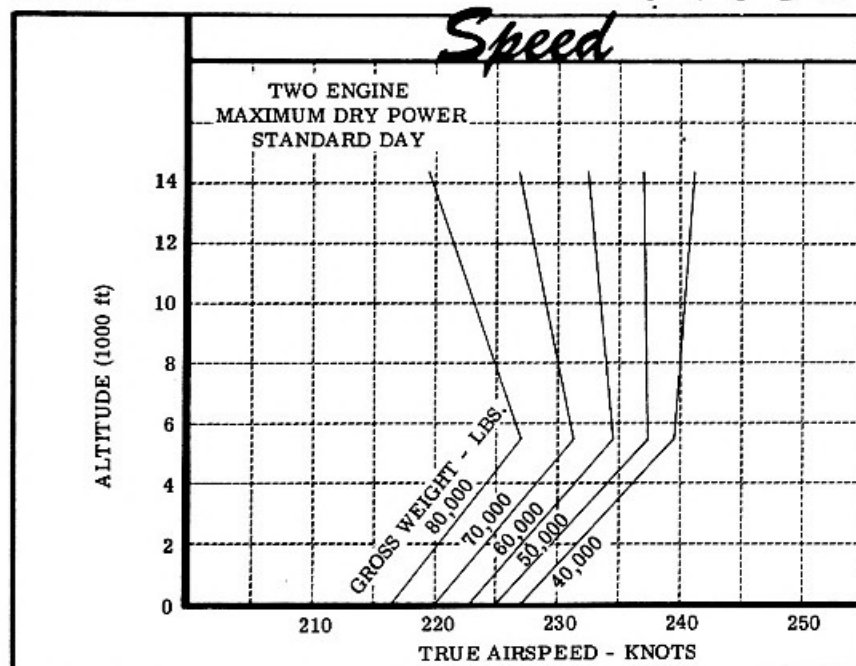
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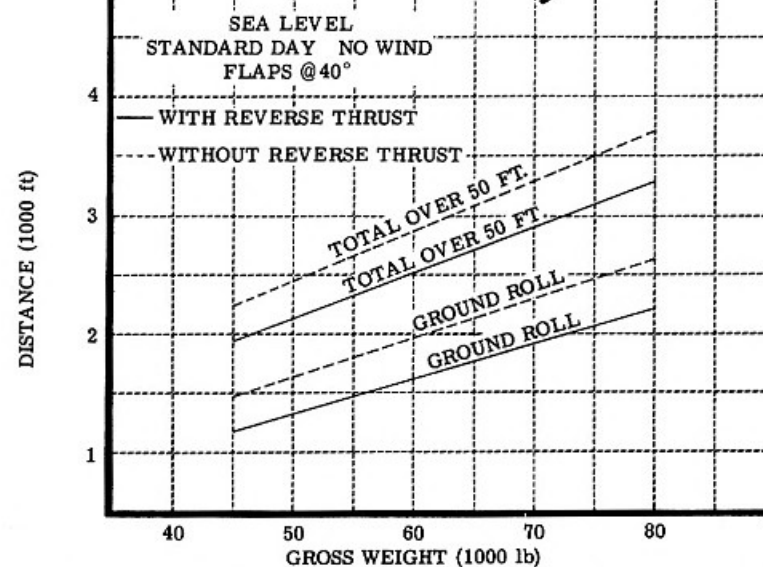
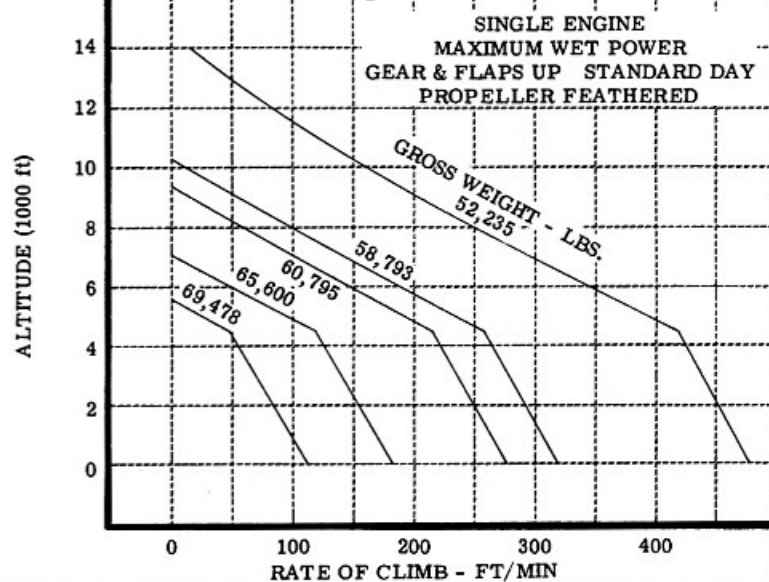
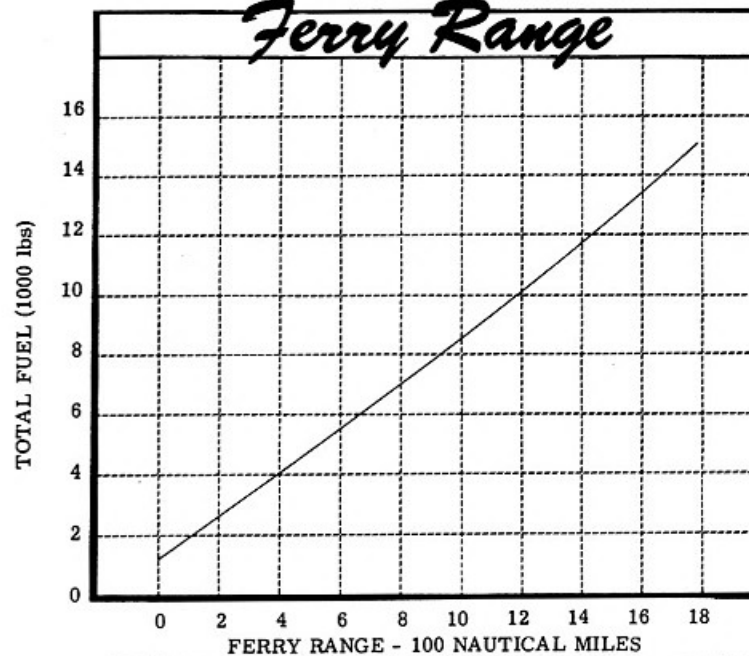
- ① Max. Wet Power
② Max. Dry Power
③ METO Power

- ④ Min. Run/Assult
⑤ Flaps at Take-off
⑥ Flaps Landing

- ⑦ Dry Hard Surface Runway
⑧ Fuel in place of
Ammunition and Flares

Take-Off*Take-Off**Climb**Climb*



*Climb***SUPPLEMENTAL***Landing**Ferry Range*

N O T E SFORMULA: RADIUS MISSION

Warm-up, taxi, and take-off with engines operating at maximum wet power. Climb on course to 5000 feet with engines at METO power and at an indicated airspeed of 140 knots. Cruise out at long range speeds to the mission search area. Search, loiter and attack from 5000 feet. Search, loiter and attack is based on maximum endurance speeds at 5000 feet during the time all ammunition and flares are spent. Upon completion of the assault mission, cruise on course back to base at 5000 feet at long range speeds and land at base assumed to be the same distance as the outbound mission leg. Range free allowances are 10 minutes of METO power for each engine for warm-up, taxi, and take-off plus fuel for 20 minutes at speeds for long range at sea level and 5% of the initial fuel for reserve.

FORMULA: RANGE MISSION

Warm-up, taxi, and take-off with engines operating at maximum wet power but without any ammunition and flares. Climb on course to 5000 feet with engines at METO power and at an indicated airspeed of 140 knots. Cruise out at long range speeds until only reserve fuel remains. Range-free allowances are 10 minutes of METO power for each engine for warm-up, taxi, and take-off plus fuel for 20 minutes at speeds for long range at sea level and 5% of the initial fuel for reserve.

GENERAL DATA

The maximum fuel gross weight is 69,478 pounds and is based on the AC-119G maximum fuel weight of 15,072 pounds. The basic gross weight is 65,600 pounds based on 100 fpm rate of climb, sea level, hot day, feathered propeller, gear and wing flaps up and with maximum wet power.

PERFORMANCE REFERENCES:

Fairchild Report Nr. 484-011, dated October 1969.