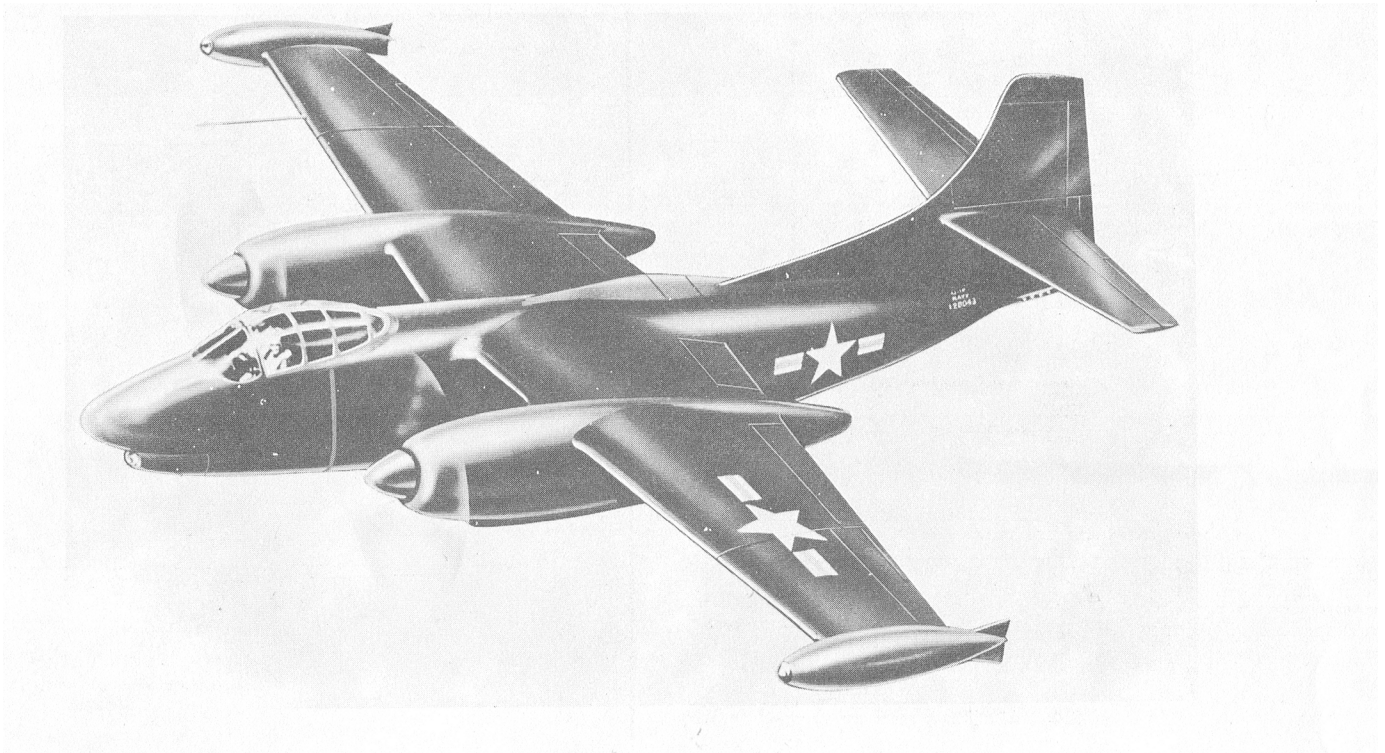
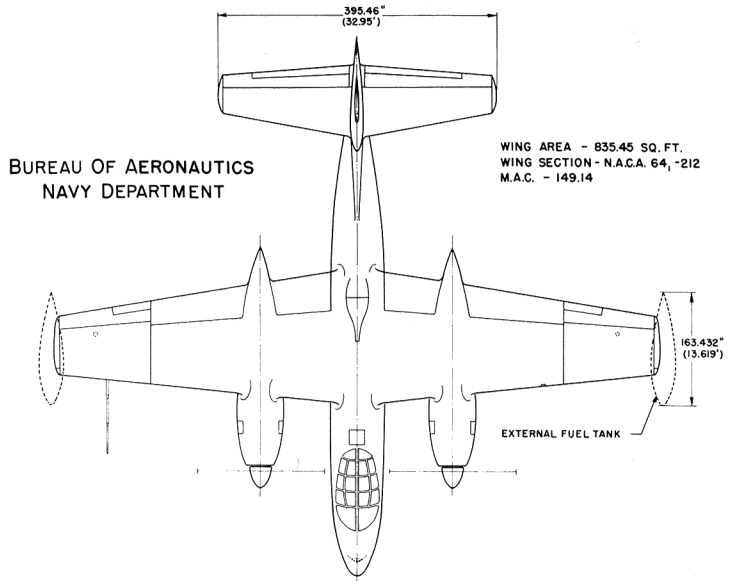


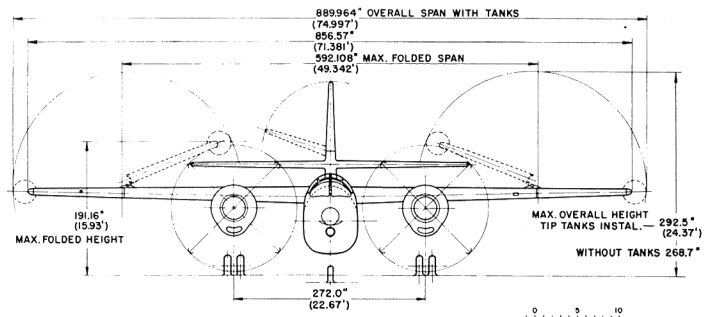
STANDARD AIRCRAFT CHARACTERISTICS

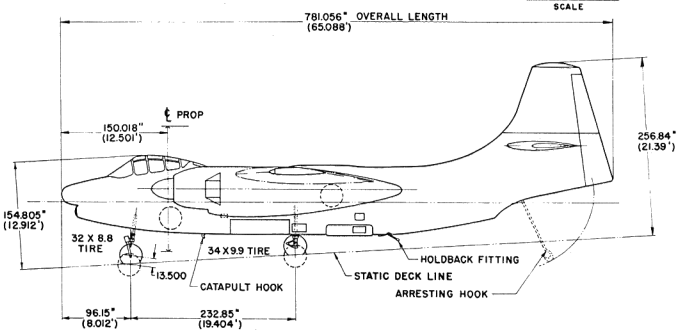
AJ-2P "SAVAGE"

NORTH AMERICAN

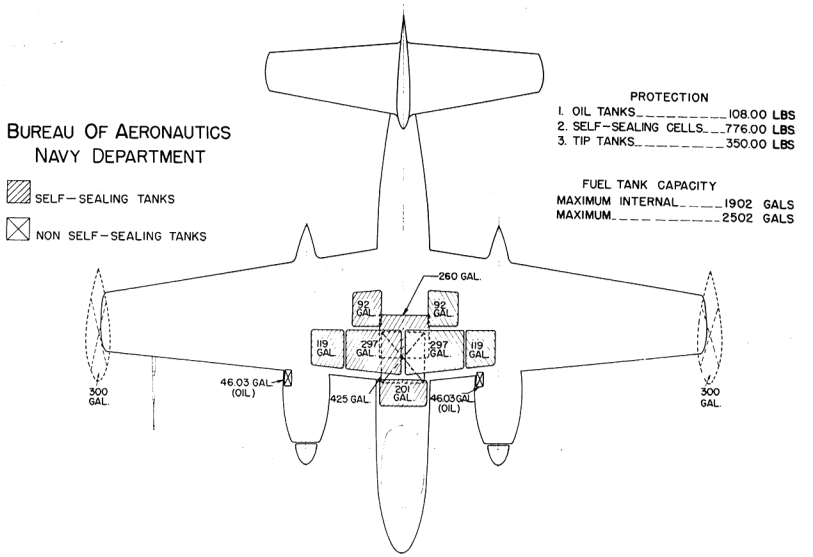
Standard Aircraft Characteristics NAVAER 1335A (REV. 1-55)

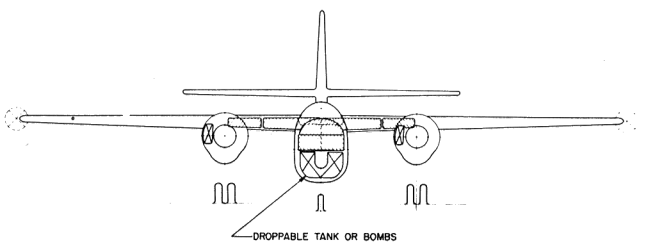


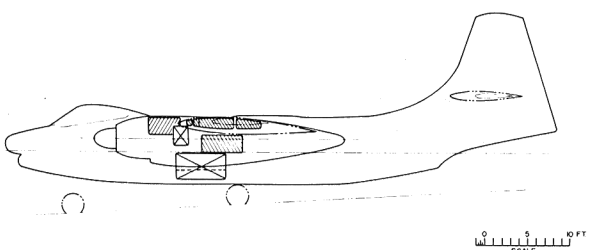




DESCRIPTIVE ARRANGEMENT







ARMAMENT & TANKS

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Standard Aircraft Characteristics NAVAER 1335B (Rev. 1-55)

POWER PLANT

NO. & MODEL.....(2) R-2800-44W
(1) J-33-A-10
MFR.....Pratt & Whitney, Allison
SUPERCH.....1 Stg., 1 Spd. & Turbo
TURBO.....G.E.-7S-CH-8-F1
PROP. GEAR RATIO.....0.350
PROP. MFR.....Ham. Std.
PROP. DES. NO.....2F17M3-24AC
NO. BL./DIA.....4/15' - 1"

RATINGS

	BHP	@ RPM	@ ALT.
T. O.	2,300	2,800	S.L.
MIL.	2,300	2,800	30,000'
NORM.	1,800	2,600	37,600'

	LBS.	@ RPM	@ ALT.
T. O.	4,600	11,750	S.S.L.
MIL.	4,600	11,750	S.S.L.
NORM.	3,900	11,250	S.S.L.

SPEC. NOS. N-8127-B and 258-D

ORDNANCE

GUNS
None

BOMBS

Type	Location	No.
T9E-8	Bomb Bay	14

CARTRIDGES

Photoflash M112(A-6 Ejector)	Bomb Bay	108
Photoflash M123(B-4 Ejector)	Bomb Bay	40

BOMB SIGHT

Control Director.....Aero 7A

CAMERAS

4 K-38 or K-48 - Aircraft Camera (Day Reconnaissance)
6 K-17C - Aircraft Camera (Day Reconnaissance)
4 T-11 - Aircraft Camera (Mapping and Charting)
4 K-37 or K-47 - Aircraft Camera (Night Reconnaissance)
3 CA-8 - Aircraft Camera (Mapping and Charting)
3 CAS-2 - Aircraft Camera (Day Reconnaissance, Strip)

(See NOTES)

MISSION AND DESCRIPTION

The AJ-2P is a carrier-based photo-reconnaissance airplane developed from the AJ-1 airplane. It will be used for both day and night photographic missions.

Principal differences from the AJ-1 are: larger vertical tail; no dihedral in horizontal tail; nose section of fuselage modified to provide camera port; overall length 2 feet greater; smaller bomb bay; and camera stations immediately aft of bomb bay.

DEVELOPMENT

Mockup date ..... January 1951
First flight ..... March 1952
Service use ..... April 1952

WEIGHTS

LOADINGS	LBS.	L.F.
EMPTY	31,900	
BASIC	32,355	
DESIGN	48,040	4.0
COMBAT	46,656	
MAX.T.O. (Field)	51,600	
(Cat.)	51,600	
MAX.LAND. (Field)	45,000	
(Arrest)	37,500	

All weights are actual

FUEL AND OIL

GALS.	NO. TANKS	LOCATION
1,016	6	Wing, S.S.
600	2	Tip, Drop
461	2	Fuse., S.S.
425	1	B.B.,Drop

FUEL GRADE.....115/145
FUEL SPEC...applicable.MIL-F-5572

OIL

	RECIP.	JET	TURBO
CAP.(Gal.)	92.06	3	3
OIL GRADE	1100	1010	1065
MIL. SPEC.	O-6082	O-6081A	O-6082

DIMENSIONS

WING AREA.....836 sq. ft.
WINGSPAN.....71' - 5"
WINGSPAN(with tiptanks)....75' - 0"
WING SPAN(folded).....49' - 4"
LENGTH.....65' - 1"
HEIGHT .....21' - 4"
HEIGHT(folded).....16' - 2"
HEIGHT(folded with tip tanks).....17' - 4"
TREAD.....22' - 8"
PROP. CLEARANCE..... 1' - 2"
M.A.C.....12' - 5"

ELECTRONICS

UHF.....AN/ARC-27
RANGE REC.....AN/ARC-5
HOMING.....AN/ARR-2A
RADIO COMPASS.....AN/ARN-6
MARKER BEACON.....AN/ARN-12
HF REC.....AN/ARR-15A
HF TRANSMITTER.....AN/ART-13
IFF.....AN/APX-6
ALTIMETER.....AN/APN-1 or -22
INTERPHONE.....AN/AIC-4
ALTIMETER-HIGH ALT.....SCR-718C
SEARCH RADAR.....AN/APS-31A
RADIO HOMING.....AN/ARN-21
Provisions for:
VHF.....AN/ARC-1 or -1A

PERFORMANCE SUMMARY

TAKE-OFF LOADING CONDITION			(1) NIGHT RECONNAISSANCE 14 - T-9E-8 Flash Bombs	(3) DAY RECONNAISSANCE	(4) NIGHT RECONNAISSANCE 14 - T-9E-8 Flash Bombs	(5) DAY RECONNAISSANCE	
TAKE-OFF WEIGHT		lb.	50,256	50,849	46,286	44,074	
Fuel	(Fixed/Drop)	lb.	8,862/3,600	8,862/6,150	8,862/ - -	8,862/ - -	
Payload	(Cameras/Bombs)	lb.	784/2,659	784/ - -	784/2,659	784/ - -	
Wing loading		lb./sq.ft.	60.1	60.9	55.3	52.7	
Stall speed - power-off		kn.	103.9	104.6	99.3	97.1	
Take-off run at S.L. - calm	(A)	ft.	2,200(1,360)	2,275(1,430)	1,650(1,000)	1,425(850)	
Take-off run at S.L. 25 kn. wind	(A)	ft.	1,300(750)	1,350(780)	875(520)	750(425)	
Take-off to clear 50 ft. - calm		ft.	- -	- -	- -	- -	
Max. speed/altitude	(B)	kn./ft.	300/26,000	295/26,000	314/30,000	323/30,000	
Rate of climb at S.L.	(B)	fpm.	970	900	1,175	1,310	
Time: S.L. to 10,000 ft.	(B)	min.	12.7	13.5	10.5	9.5	
Time: S.L. to 20,000 ft.	(B)	min.	28.0	30.2	22.0	19.0	
Service ceiling (100 fpm)	(B)	ft.	34,250	34,000	34,500	36,500	
Combat range		n.mi.	1,880	2,365	1,265	1,380	
Average cruising speed		kn.	230	242	237	234	
Cruising altitude(s)		ft.	25,000	25,000	25,000	25,000	
Combat radius		n.mi.	840	1,080	545	570	
Average cruising speed		kn.	207	209	210	210	
Mission time		**hr.**	8.3	10.6	5.4	5.6	

COMBAT LOADING CONDITION		(2) Flash Bombs retained				
COMBAT WEIGHT	lb.	46,656				
Engine power		Dry Mil.,All Eng.				
Fuel	lb.	8,862				
Combat speed/combat altitude	kn./ft.	384/30,000				
Rate of climb/combat altitude	fpm/ft.	1,825				
Combat ceiling (500 fpm)	ft.	40,500				
Rate of climb at S.L.	fpm.	2,875				
Max. speed at S.L.	kn.	309				
Max. speed/altitude	kn./ft.	386/35,000				
LANDING WEIGHT	lb.	36,124				
Fuel	lb.	989				
Stall speed - power-off	kn.	88.4				
Stall speed - with approach power	kn.	75.6				

NOTES

REASONS FOR REISSUE: Performance data completely based on NATESTCEN Flight Test Data.

(A) Take-off distances are for take-off power on reciprocating engines. Figures in parenthesis are for take-off power on all engines.

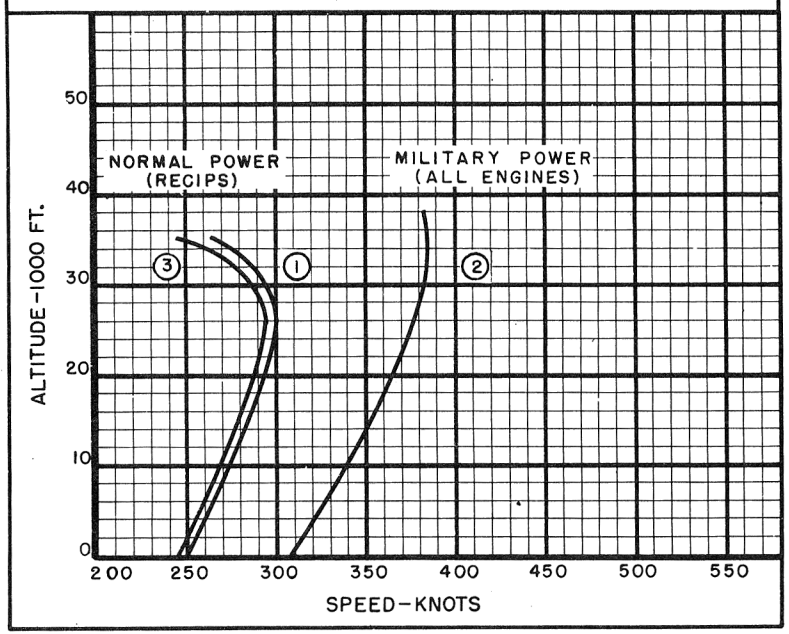
(B) Normal Rated Power (2 reciprocating engines).

COMBAT RANGE and RADIUS are based on Flight Test Data fuel consumption increased by 5%.

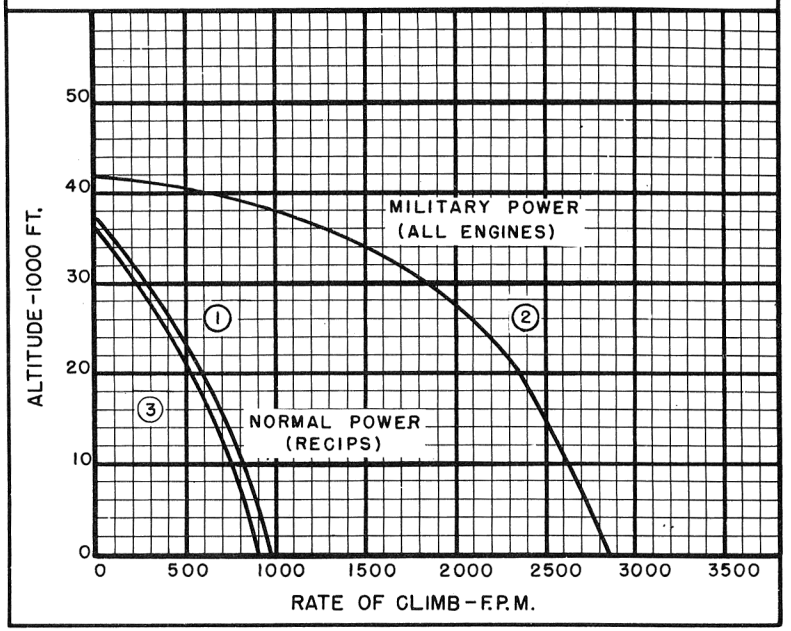
Tip tanks are carried at all times. (Cruising fuel consumption is better with tip tanks on than with tip tanks off).

SPOTTING: A total of 22 airplanes can be accommodated in a landing spot on the flight and hangar decks of a CVA-19 class angled deck carrier.

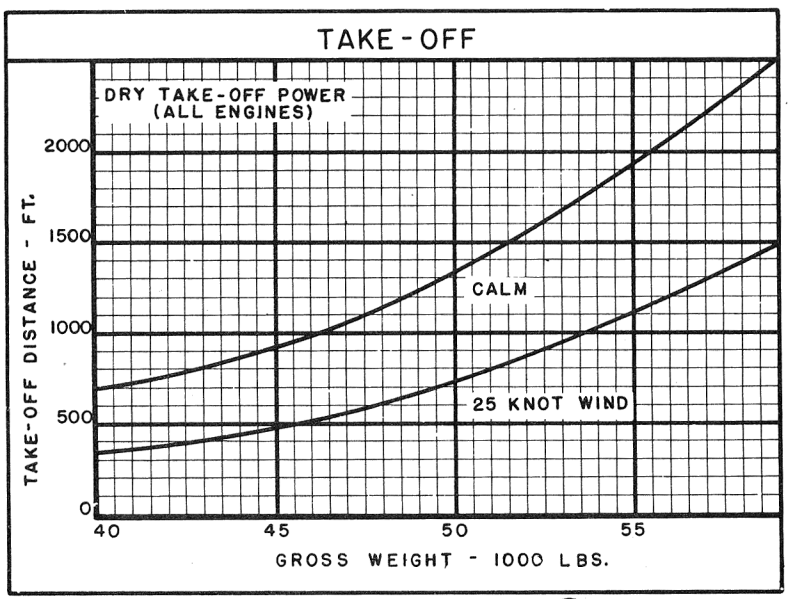
SPEED



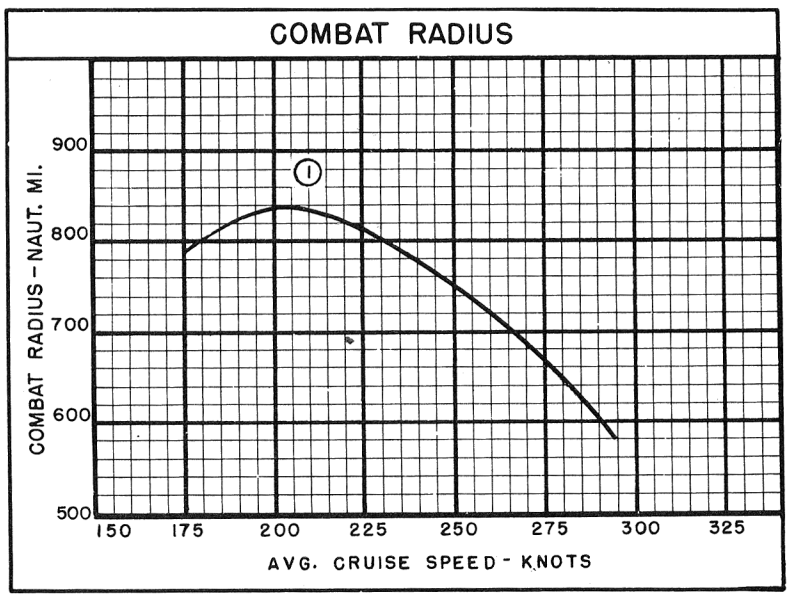
CLIMB



TAKE-OFF



COMBAT RADIUS



◯ LOADING CONDITION COLUMN NUMBER

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Standard Aircraft Characteristics NAVAER 1335E (Rev. 1-55)

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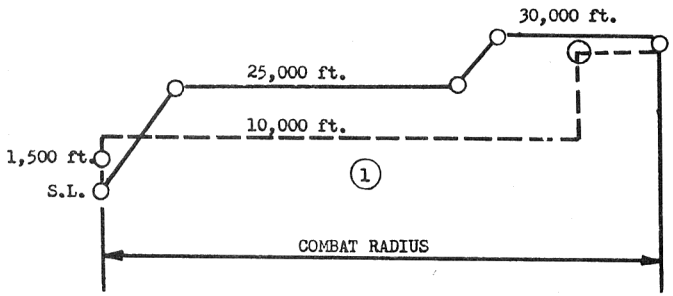
NOTES

HIGH ALTITUDE RECONNAISSANCE COMBAT RADIUS PROBLEM

WARM-UP, TAXI, TAKE-OFF: Reciprocating engines; 10 minutes at normal rated power at sea level.
Jet engine: 5 minutes at normal rated power at sea level.
CLIMB: On course to 25,000 feet at normal rated power. Jet off.
CRUISE-OUT: At 25,000 feet at V for long range. Jet off. Tip tanks retained.
CLIMB: On course to 30,000 feet at normal rated power. Jet off. Climb ends 87 nautical miles from target.
CRUISE-OUT: 43.5 nautical miles at 30,000 feet at V for long range. Jet off.
RUN-IN: 43.5 nautical miles at 30,000 feet at military rated power, all engines.
DROP FLARE, TAKE PHOTOGRAPHS
RUN-OUT: 43.5 nautical miles at 30,000 feet at military rated power, all engines.
DESCEND: To 10,000 feet. (No fuel used, no distance gained).
CRUISE-BACK: At 10,000 feet at V for long range. Jet off.
DESCEND: To 1,500 feet. (No fuel used, no distance gained).
RESERVE: 30 minutes at V for long range at sea level (Jet off) plus 5% of initial fuel load.

COMBAT RADIUS = CLIMB + CRUISE-OUT + CLIMB + CRUISE-OUT + RUN-IN = RUN-OUT + CRUISE-BACK
MISSION TIME = CLIMB + CRUISE-OUT + CLIMB + CRUISE-OUT + RUN-IN + RUN-OUT + CRUISE-BACK



ORDNANCE (Continued)

1 A-10 - Motion Picture Camera (forward firing 35mm.)
CR-1a - 35mm Radarscope Recording Camera (for APS-31)
1 AN-N6a - 16mm Camera (for Data Recording, Photographic runs)
3 AN-N9 - 16mm Cameras, Gun, (for Target recording.)

SPECIAL PHOTO EQUIPMENT

MOUNT, CAMERA

Type	Location	No.
A-28 Stabilized	Camera Compartment	1
	Viewfinder	
A-16VF	Right side cockpit	1

○ LOADING CONDITION COLUMN NUMBER

Standard Aircraft Characteristics NAVAER 1335F (Rev. 1-55)