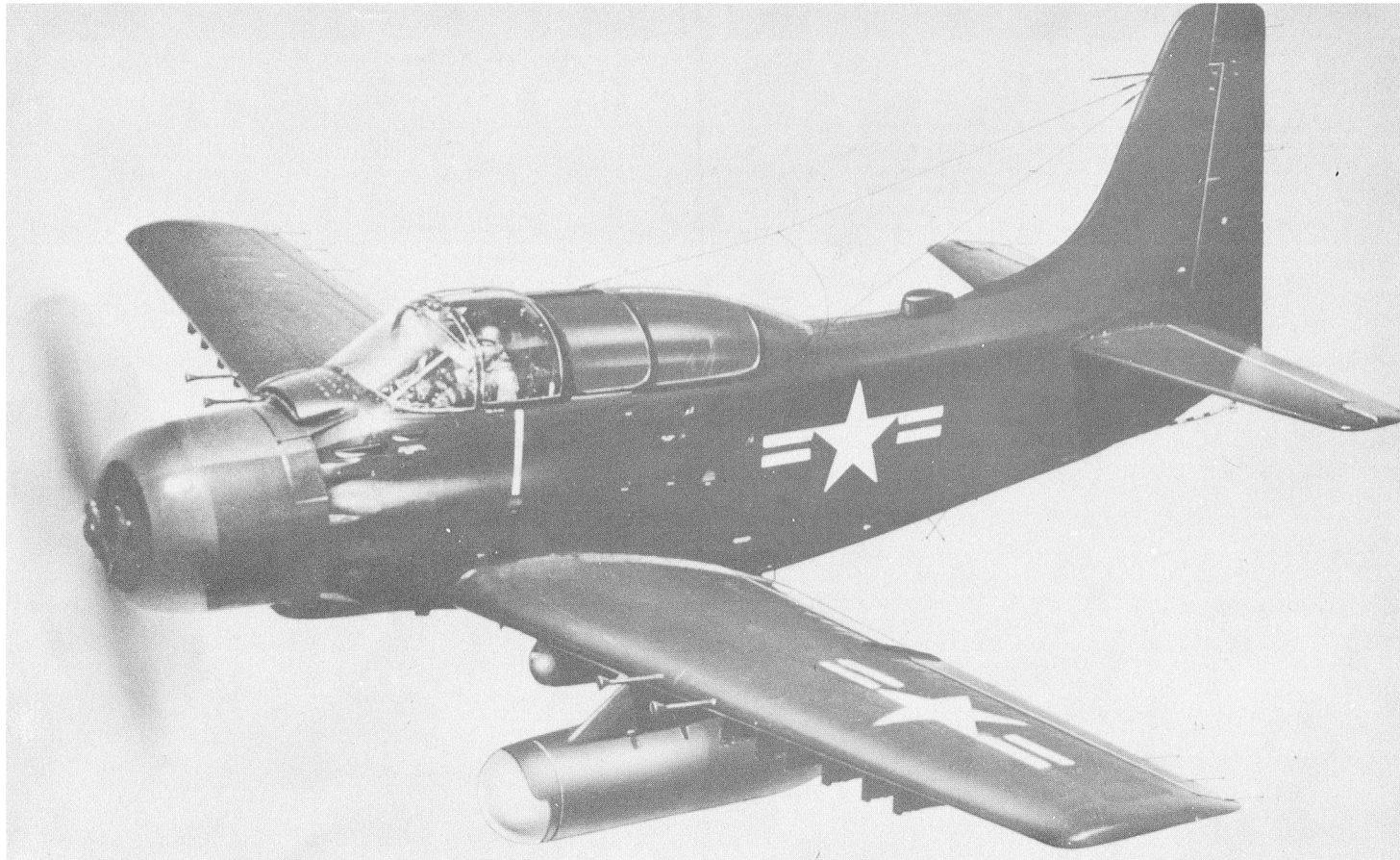


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Standard Aircraft Characteristics of NAVALER 1335A (REV. 1-55)

# STANDARD AIRCRAFT CHARACTERISTICS

## AD-5N "SKYRAIDER"

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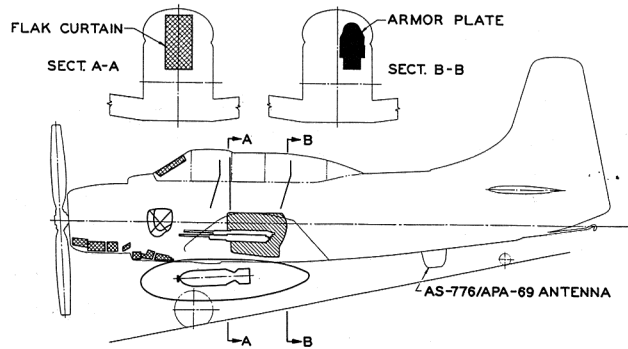
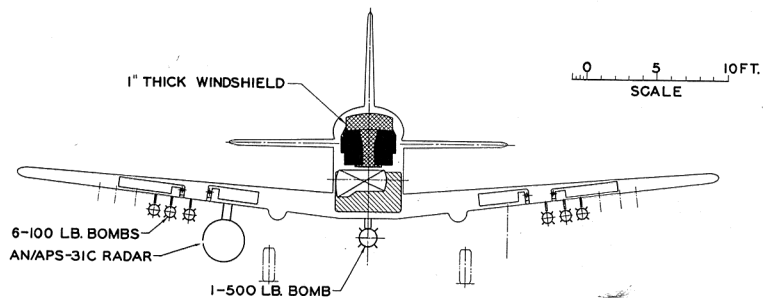
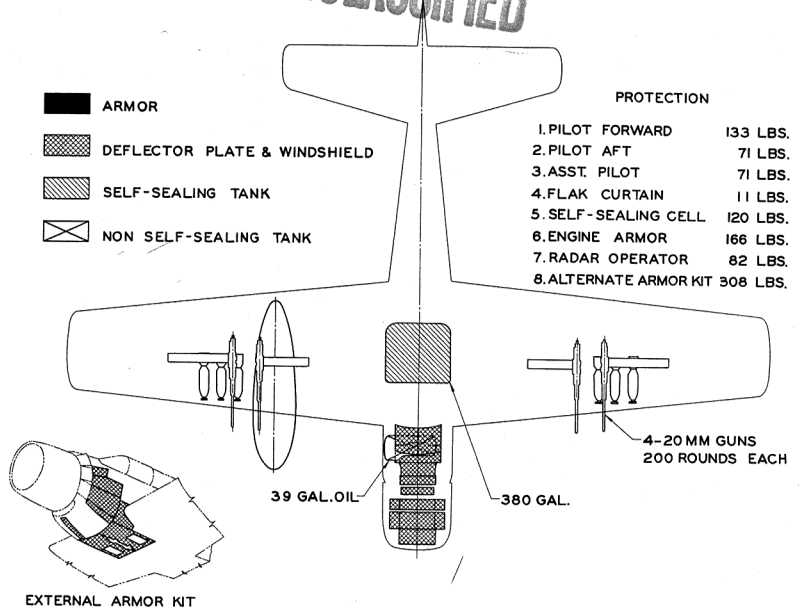
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FOR OPEN PUBLICATION  
18 JUL 1986  
COMNAVAIRSYSCOM

A. W. Frasca AD-5N  
Public Information Officer  
By direction of the Commander

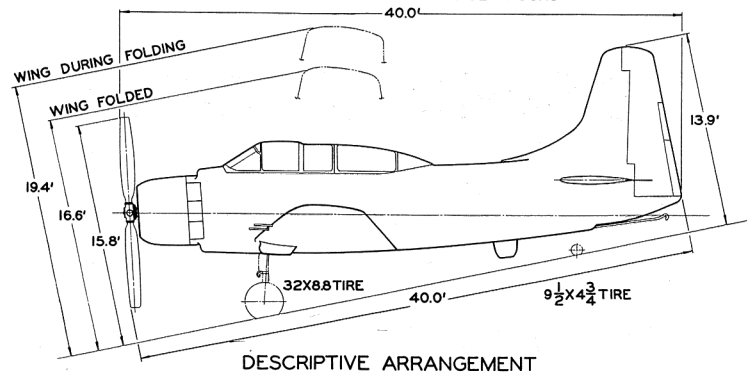
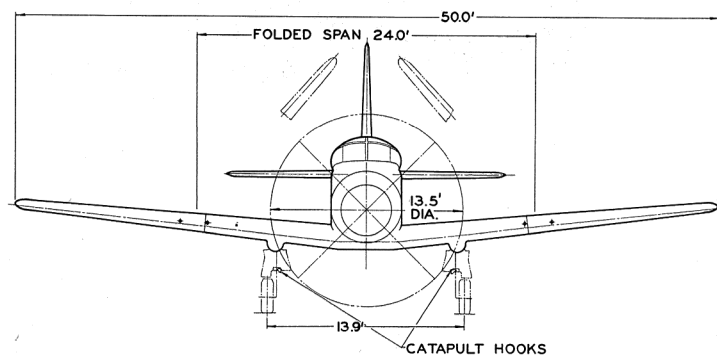
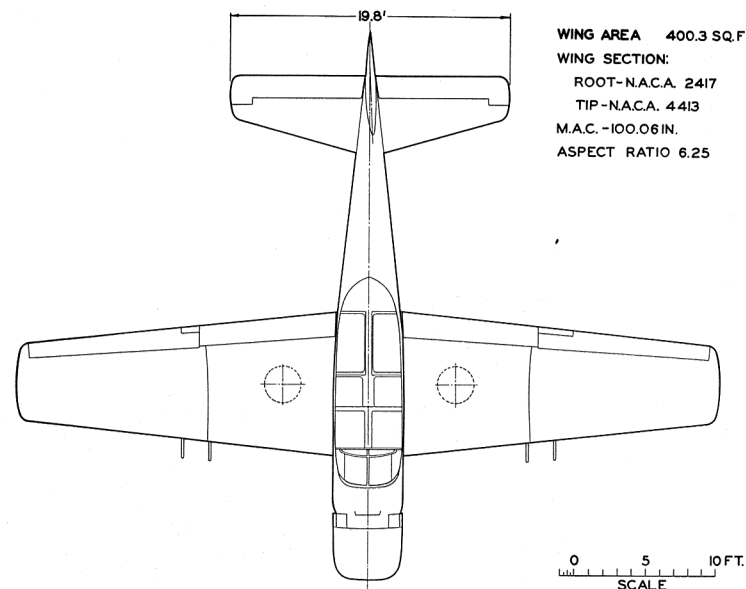
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ARMAMENT & TANKAGE



DESCRIPTIVE ARRANGEMENT

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Standard Aircraft Characteristics NAVAR 1395B (Rev. 1-55)

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**POWER PLANT**

No. & Model.....(1) R-3350-26-WA  
 Mfr.....Wright Aero  
 Superchg.....Single Stage Two Speed  
 Red. Gear Ratio......4375:1  
 Prop. Mfr.....Aero Products  
 Blade Des. No.....M20A2-162-0  
 No.Blades/Prop.Dia.....4/13'6"

**RATINGS**

	BHP	@ RPM	@ ALT.
T.O.	2,700	2,900	S.L.
MIL.	2,700	2,900	3,700
	2,100	2,600	14,500
NORM.	2,300	2,600	6,200
	1,900	2,600	17,000

Spec. No. ....NB36-D

**ORDNANCE**

Maximum Bomb Load.....8000 lbs.  
Centerline (1-Aero 3A Ejector)  
 Bombs.....1-2000 lb. 1-500 lbs.  
                   1-1600 lb. 1-250 lbs.  
                   1-1000 lb. 1-100 lbs.  
 Depth Bomb....1-350 lb.  
 Mines.....1-2000 lb. 1-500 lbs.  
                   1-1000 lb.  
 Torpedoes.....One  
 Frag. Clust...1-500 lb. 1-100 lbs.  
 Incend. Cl...1-500 lb. 1-100 lbs.  
 Chem. Tanks...1-Aero 14A  
 Fuel Tanks...1-300 gal. 1-150 gal.  
 Prac. Bombs...1-Aero 4A Container  
 (Mk.47 Rack)..1-Aero 5A Container  
 Misc.Stores...1-Mk. 7 1-Mk. 91  
                   1-Mk. 8 1-BOAR  
                   1-Mk.12 1-Mk. 90  
                   1-APT-16 Radar Store  
                   1-Aero 2A Sono/fl. disp.  
Inner Wing (2-Mk.51 Bomb Racks)  
 Bombs.....2-2000 lb. 2-500 lb.  
                   2-1600 lb. 2-250 lb.  
                   2-1000 lb. 2-100 lb.  
 Depth Bomb...2-350 lb.  
 Mines.....2-2000 lb. 2-500 lb.  
                   2-1000 lb.

Continued on NOTES Page

**MISSION AND DESCRIPTION**

The principal mission of the AD-5N is that of night attack and radio countermeasures. It is also a bomber, mine-layer, torpedo or scout airplane capable of operating from carrier or land bases. The AD-5N has complete installation provisions for all equipment required for anti-submarine operations and also contains structural provisions for any item of tactical equipment normally carried on any other AD-5 model. The AD-5N is a development of the AD series and incorporates a side-by-side seating for an assistant pilot. A radar operator is located aft of the pilot. The crew and all special tactical equipment is located within a unified cockpit area to permit interchange of crew positions and maintenance of electronics equipment in flight. The AD-5N incorporates increased armament, improved maintenance, and improved aerodynamic characteristics. A single dive brake is provided for dive bombing and maneuvering control. The airplane arrangement provides space for additional equipment as may be dictated by future tactical requirements.

**DEVELOPMENT**

First Flight.....August 1952  
 Service Use.....March 1954

**DIMENSIONS**

WING  
 AREA.....400.3 sq.ft.  
 SPAN.....50.0 ft.  
 MAC.....8.4 ft.  
 LENGTH.....40.0 ft.  
 HEIGHT.....15.8 ft.  
 TREAD.....13.9 ft.  
 PROP.GRD. CLEARANCE.....6 in.

**WEIGHTS**

LOADINGS	LBS.	L.F.
EMPTY.....	12,112	
BASIC.....	14,641	
DESIGN.....	17,000	6.4
COMBAT.....	18,505	5.9
MAX.T.O. (FIELD).....	25,000	
(CAT.).....	25,000	
MAX.LDG. (FIELD).....	21,000	
(ARREST).....	17,500	

ALL WEIGHTS ARE CALCULATED

**FUEL AND OIL**

GALS.	NO. TANKS	LOCATION
380*.....	1	Fuselage
150 or 300.....	1	Ctr. Drop
150 or 300.....	2	Wing Drop
Fuel Grade.....		115/145
Fuel Spec.....		MIL-F-5772

\*Self Sealing Tank  
 Max. useable fuel 980 gal. (limited by oil cap.)

**OIL**

CAPACITY.....39 gals.  
 SPEC.....AN-0-8  
 GRADE.....1120

**ELECTRONICS**

UHF Trans.-Rec.....AN/ARC-27A  
 MHF Trans.-Rec.....AN/ARC-2  
 Radio Altimeter.....AN/APN-22  
 Marker Beacon.....AN/ARN-12  
 IFF.....AN/APX-6  
 IFF Coder.....AN/APA-89  
 LF ADF.....AN/ARN-6  
 UHF ADF.....AN/ARA-25  
 Interphone.....AN/AIC-4  
 Radar Search.....AN/APS-31C  
 LAB Radar Bombsight.....AN/APA-16  
 LAB R-R Adapter.....MX-476/APA-16  
 Sonobuoy Rec.....AN/ARR-26  
 Searchlight.....AN/AVQ-2A  
 ECM Rec.....AN/APR-9B

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Standard Aircraft Characteristics NAVAR-1335C (Rev. 1-55)

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## PERFORMANCE SUMMARY

TAKE-OFF LOADING CONDITION	(1) ATTACK 1-500 lb. bomb 6-100 lb. bombs	(3) 1-1660 lb. Store 300 gal. Aero 1A Fuel Tank	(4) ASW ATTACK Mk. 34 Torpedo AN/APG-2 Search- light and Sono- buz Dispenser	(5) ATTACK 1-1000 lb. Bomb 1-500 lb. Bomb 12-100 lb. Bombs
TAKE-OFF WEIGHT lb.	20,517	23,069	21,320	22,117
Fuel lb.	2,280	4,080	2,280	2,280
Fayload lb.	1,100	1,660	1,200	2,700
Wing loading lb./sq.ft.	51.3	57.7	53.3	55.3
Stall speed - power-off kn.	89.7	95.1	91.4	93.1
Take-off run at S.L. - calm ft.	1,200	1,600	1,300	1,440
Take-off run at S.L. 25 kn. wind ft.	600	830	670	740
Take-off to clear 50 ft. - calm ft.	2,025	2,775	2,230	2,465
Max. speed/altitude (A) kn./ft.	257/17,300	257/17,300	245/17,100	240/17,100
Rate of climb at S.L. (A) fpm.	1,640	1,330	1,480	1,360
Time: S.L. to 10,000 ft. (A) min.	6.5	8.3	7.3	8.1
Time: S.L. to 20,000 ft. (A) min.	16.3	22.3	18.8	21.4
Service ceiling (100 fpm) (A) ft.	24,500	22,300	23,200	22,100
Combat range n.mi.	575	1,135	510	475
Average cruising speed kn.	165	170	165	165
Cruising altitude(s) ft.	5,000	5,000	5,000	5,000
Combat radius n.mi.	205	500	185	185
Average cruising speed kn.	165	170	165	165
Total Mission time hrs.	2.7	6.2	2.5	2.5
<b>COMBAT LOADING CONDITION</b>				
(2) CLEAN 60% Fuel				
COMBAT WEIGHT lb.	18,505			
Engine power (B)	Military			
Fuel lb.	1,368			
Combat speed/combat altitude kn./ft.	263/Sea Level			
Rate of climb/combat altitude fpm/ft.	2,580/Sea Level			
Combat ceiling (500 fpm) ft.	24,300			
Rate of climb at S.L. fpm.	2,580			
Max. speed at S.L. (C) kn.	263			
Max. speed/altitude kn./ft.	280/15,100			
<b>LANDING WEIGHT</b>				
Fuel lb.	234			
Stall speed - power-off kn.	82.5			
Stall speed - with approach power kn.	77.7			

## NOTES

- (A) Normal rated power.
- (B) If the water injection kit is installed including 12½ gal. A.D.I. fluid the airplane weight is increased 136 lbs., the maximum available combat BHP is 3,150 horsepower and the sea level high speed is 278 knots and the sea level rate of climb is 3,140 ft./min.
- (C) If the 1,660 lb. store is aboard, the sea level high speed is 272 knots with combat power and 258 knots with military power.

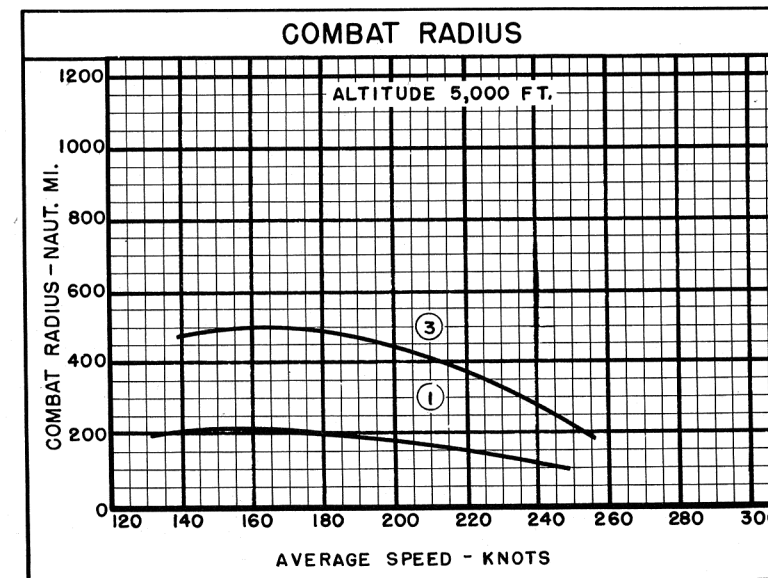
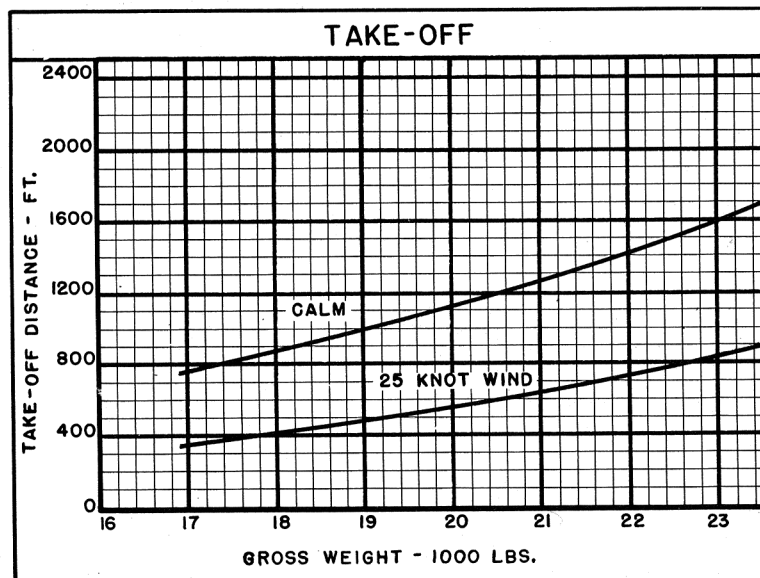
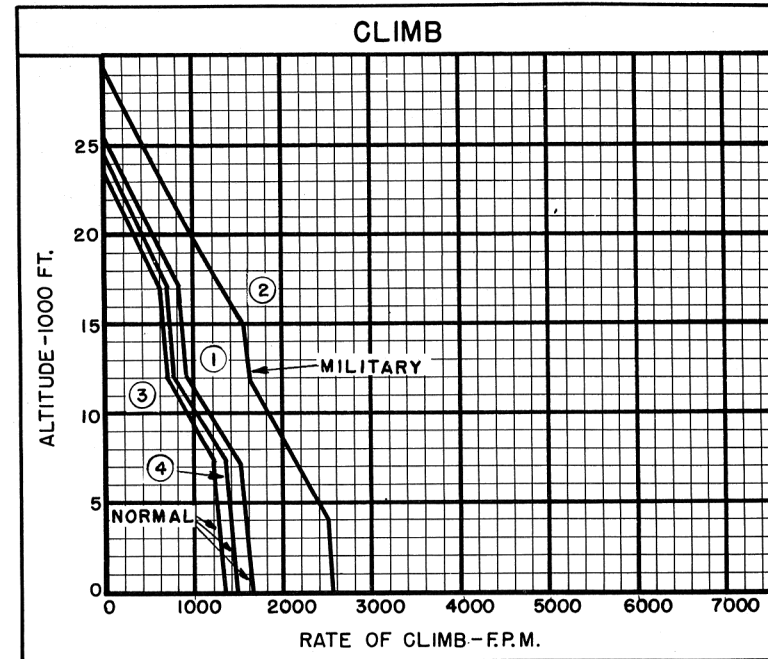
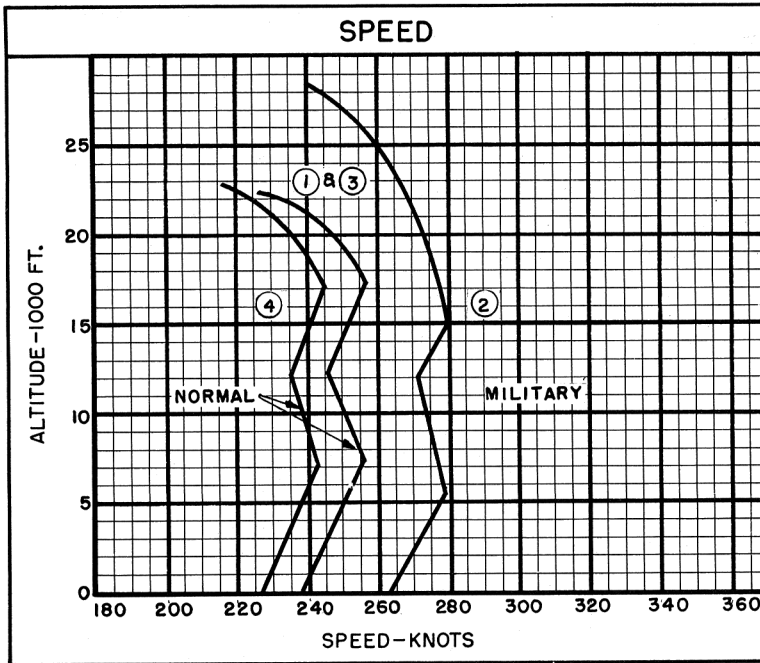
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Standard Aircraft Characteristics NAVAR 1325E (Rev. 1-55)

○ LOADING CONDITION COLUMN NUMBER

