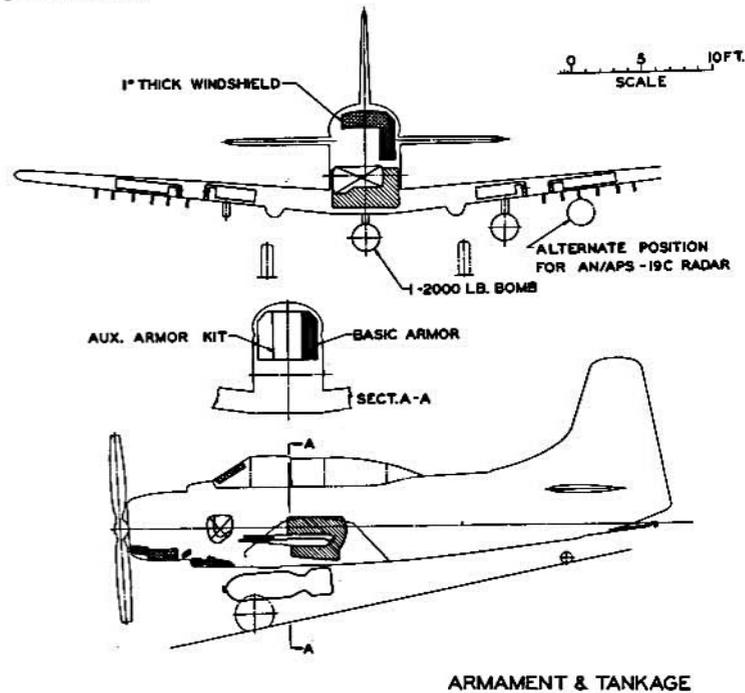
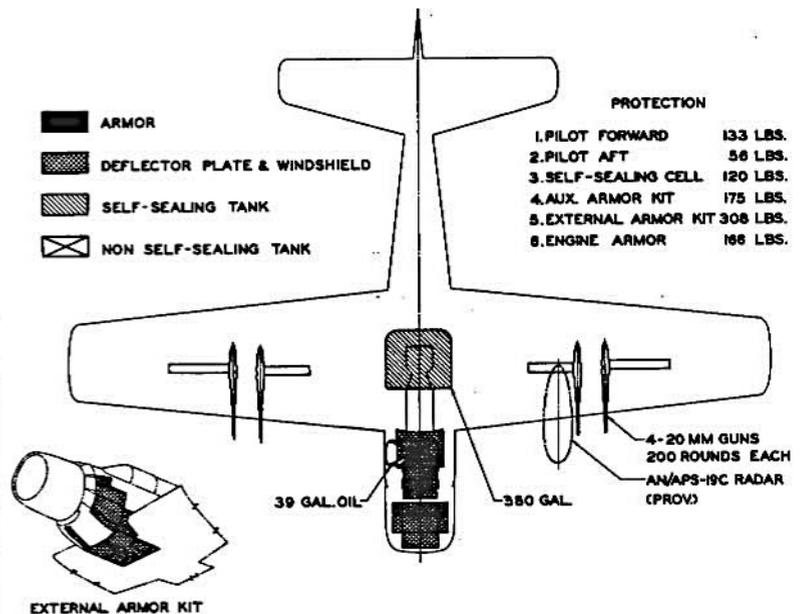
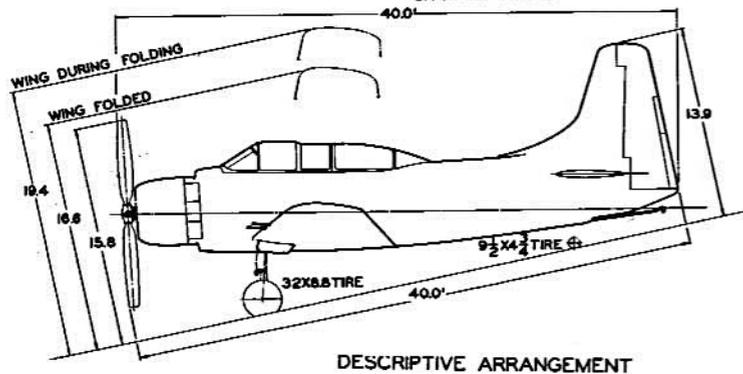
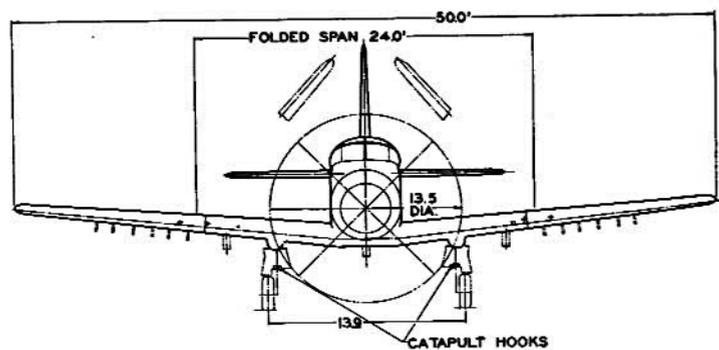
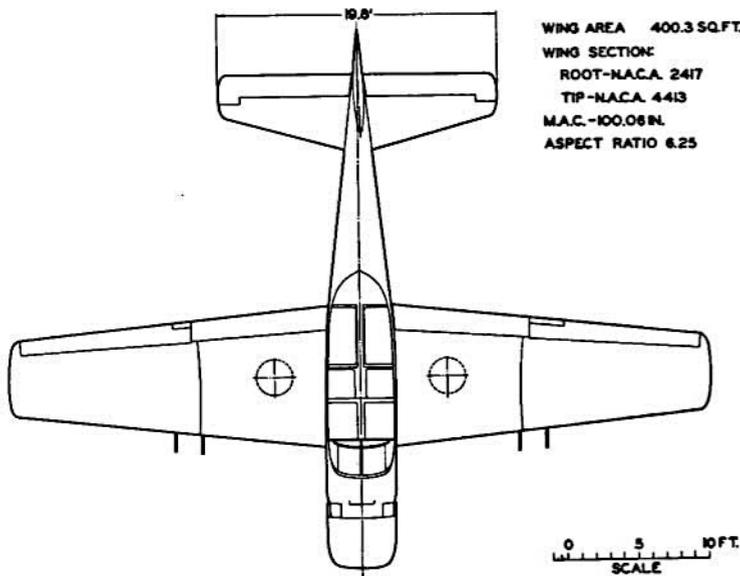


# STANDARD AIRCRAFT CHARACTERISTICS

AD-5 "SKYRAIDER"

DOUGLAS



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

## POWER PLANT

NO. & MODEL.....(1) R-3350-26-WA  
 MFR.....Wright Aero  
 SUPERCH.....Single Stage Two Speed  
 REDUCT.GEAR RATIO.....4375:1  
 PROP. MFR.....Aero Products  
 BLADE DES. NO.....M20A2-162-0  
 NO. BLD./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.....8,000 lbs.  
 Centerline (1-Aero 3A Ejector)

Bombs	1-2700 lb.	1-500 lb.
	1-1600 lb.	1-250 lb.
	1-1000 lb.	1-100 lb.
Depth Bomb	1-350 lb.	
Mines	1-2000 lb.	1-500 lb.
	1-1000 lb.	
Torpedoes	0ns	
Frag. Clust.	1-500 lb.	1-100 lb.
Incend. Cl.	1-500 lb.	1-100 lb.
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-APS-16 Radar Store	
	1-Aero 2A Sono/F.L. disp.	
Inner Wing	(2-Mk. 51 Bomb Racks)	
Bombs	2-2000 lb.	2-500 lb.
	2-1500 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-5 is that of general purpose attack and ground support. It is also a torpedo, minelayer or scout airplane capable of operating from all classes of carriers or from land bases. The AD-5 is a development of the AD series and incorporates side by side seating for an assistant pilot. The revised crew arrangement facilitates all-weather operation and permits utilization for long range navigation, radar search, spotting and observation, air support coordination, instrument training, pilot familiarization and other operations requiring a second crew member. Controls, armament, and tactical equipment are located for single pilot operation. A single dive brake is provided for dive bombing and maneuvering control.

The AD-5 can be converted rapidly aboard a carrier for operation as a passenger, cargo, ambulance or long range airplane by installation of appropriate conversion kits supplied as alternate equipment.

## DEVELOPMENT

First Flight.....August 1951  
 Service Use.....April 1953

## DIMENSIONS

WING  
 AREA.....400.3 sq.ft.  
 SPAN.....50 ft.  
 MAG.....8.4 ft.  
 LENGTH.....40.0 ft.  
 HEIGHT.....15.8 ft.  
 TREAD.....13.9 ft.  
 PROP. GRD. CLEARANCE.....6 in.

## WEIGHTS

LOADINGS	LES.	L.F.
EMPTY.....	12,293.....	
BASIC.....	14,309.....	
DESIGN.....	17,000.....	6.4
COMBAT.....	16,760.....	6.5
MAX.WT (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
380W.....	1.....	Fuselage
150 or 300.....	1.....	Ctr. Drop
150 or 300.....	2.....	Wing Drop
Fuel Grade.....	115/145	
Fuel Spec.....	MIL-R-5572	

\*Self Sealing Tank  
 Max. Useable Fuel 980 gal. (limited by oil cap.)

## OIL

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

## ELECTRONICS

UHF COMM.....	AN/ARC-27A
UHF DIR. FINDER.....	AN/ARA-25
RADIO ALTIMETER.....	AN/APN-22
NAV RECEIVER.....	AN/ARR-2A
MARKER BEACON.....	AN/ARN-12
LF ADF.....	AN/ARN-6
IFF.....	AN/APX-6
SEARCH RADAR.....	AN/APS-19C
INTERPHONE.....	AN/AIC-4
TACAN.....	AN/ARN-2
	(Alternate to AN/ARN-6)

## PERFORMANCE SUMMARY

TAKE-OFF LOADING CONDITION		(1) ATTACK 1-2000 lb. Bomb	(3) ATTACK 1-2000 lb. Bomb 2-150 gal. Tanks 12-5" HVAR
TAKE-OFF WEIGHT	lb.	19,672	23,356
Fuel	lb.	2,280	4,080
Payload	lb.	2,000	3,680
Wing loading	lb./sq.ft.	49.2	58.4
Stall speed - power-off	kn.	87.8	95.7
Take-off run at S.L. - calm	ft.	1,070	1,660
Take-off run at S.L. 25 kn. wind	ft.	535	880
Take-off to clear 50 ft. - calm	ft.	1,820	2,870
Max. speed/altitude	(A) kn./ft.	271/17,400	246/7,500
Rate of climb at S.L.	(A) fpm.	1,840	1,240
Time: S.L. to 10,000 ft.	(A) min.	5.7	9.0
Time: S.L. to 20,000 ft.	(A) min.	14.1	25.3
Service ceiling (100 fpm)	(A) ft.	26,400	21,200
Combat range	n.mi.	655	1,045
Average cruising speed	kn.	170	170
Cruising altitude(s)	ft.	5,000	5,000
Combat radius	n.mi.	235	510
Average cruising speed	kn.	170	170
Mission time	hrs.	3.1	6.4
COMBAT LOADING CONDITION		(2) CLEAN 60% Fuel	
COMBAT WEIGHT	lb.	16,760	
Engine power		Military	
Fuel	lb.	1,368	
Combat speed/altitude	(B) kn./ft.	269/Sea Level	
Rate of climb/altitude	(B) fpm/ft.	2,990/Sea Level	
Combat ceiling (500 fpm)	ft.	26,800	
Rate of climb at S.L.	fpm.	2,990	
Max. speed at S.L.	kn.	269	
Max. speed/altitude	kn./ft.	286/15,200	
LANDING WEIGHT	lb.	15,610	
Fuel	lb.	218	
Stall speed - power-off	kn.	78.2	
Stall speed - with approach power	kn.	73.6	

## NOTES

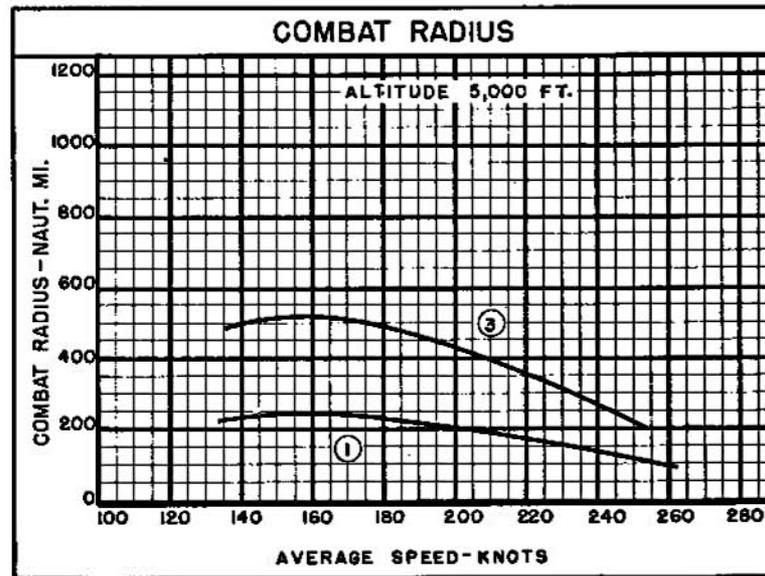
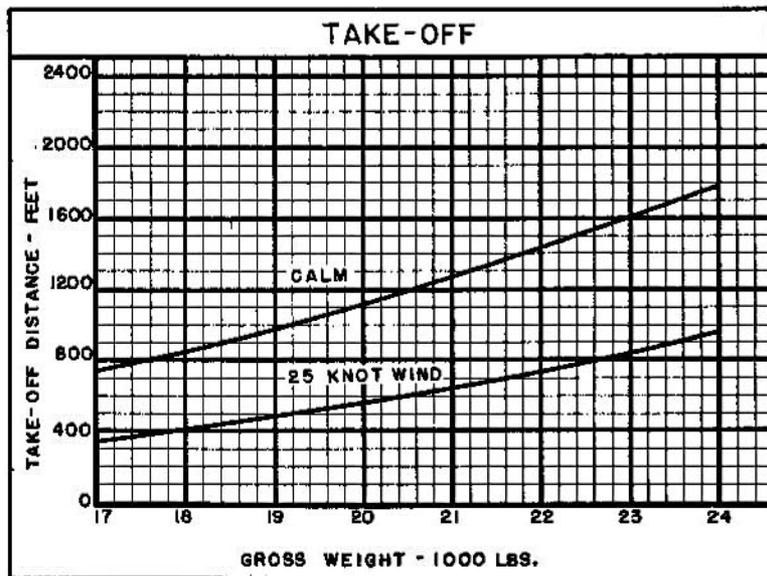
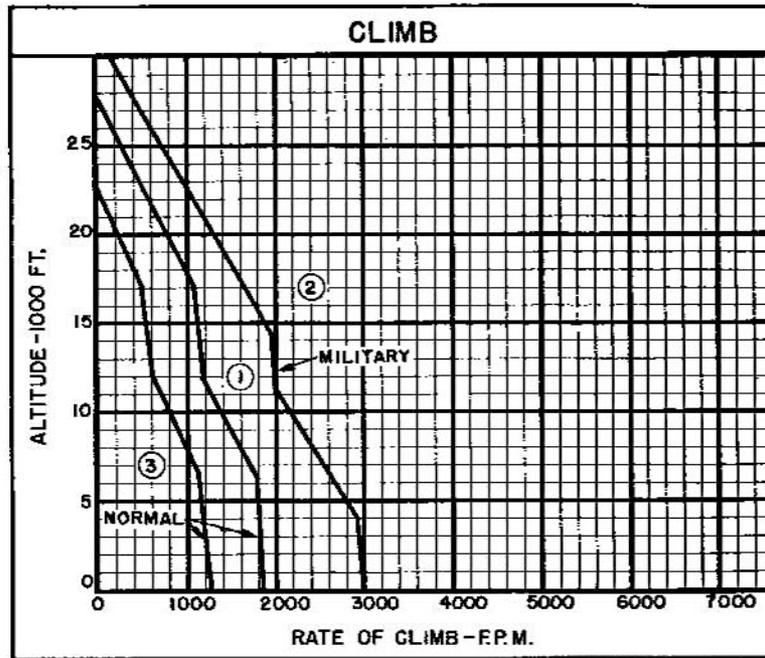
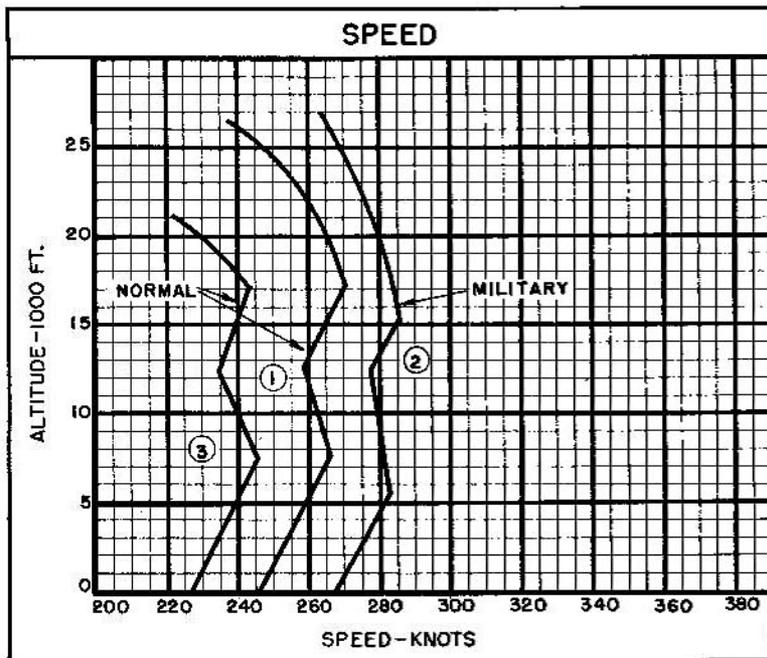
- (A) Normal rated power.  
 (B) Maximum speed and rate of climb at sea level are 283 knots and 3,670 fpm, respectively, with combat power (3150 BHP).  
 Installation of water injection system, including 12½ gal. ADI fluid, increases airplane weight by 136 lbs.

PERFORMANCE BASIS: Performance is calculated and based on contractor's flight tests of models AD-4B, AD-5, and AD-6.

COMBAT RANGE AND RADIUS are based on fuel consumption data from AD-4B, AD-5 and AD-6 flight tests increased by 5%.

All loadings include centerline and two inner wing racks, 12 Aero 14 racks, external armor plate, and four 20mm guns.

Standard Aircraft Characteristics NAVAR 1335E (rev. 1-55)



○ LOADING CONDITION COLUMN NUMBER

