

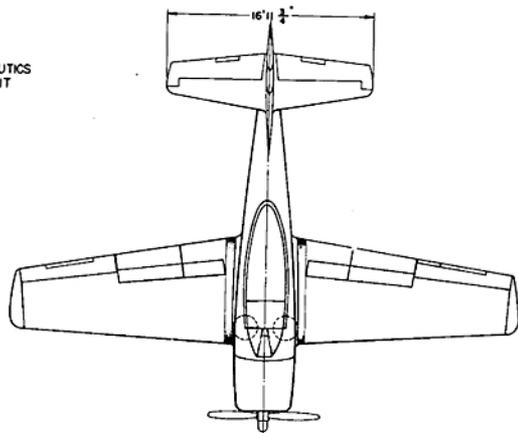
STANDARD AIRCRAFT CHARACTERISTICS

XSN2J-1

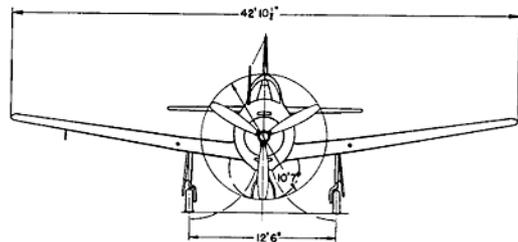
NORTH AMERICAN

EXPERIMENTAL

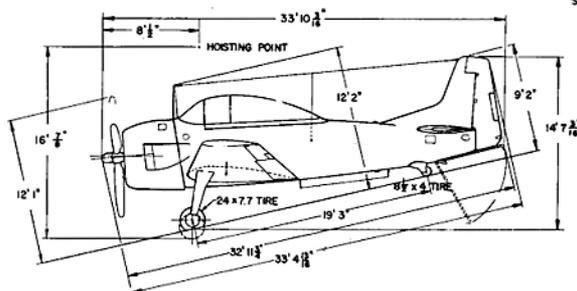
BUREAU OF AERONAUTICS
NAVY DEPARTMENT



WING AREA- 302.63 SQ. FT.
WING SECTION-
N.A.C.A. 241SR (ROOT)
N.A.C.A. 441SR (TP)
M.A.C.- 87.88 INCHES
PROP.- HAMILTON STD. C.S.
BLADE DES. NO. 6547A-12



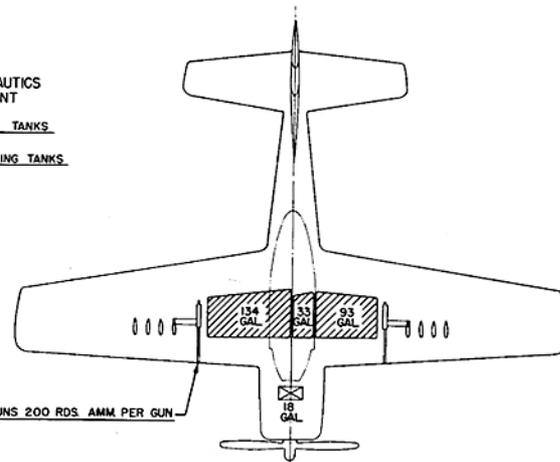
0 5 10 FT.
SCALE



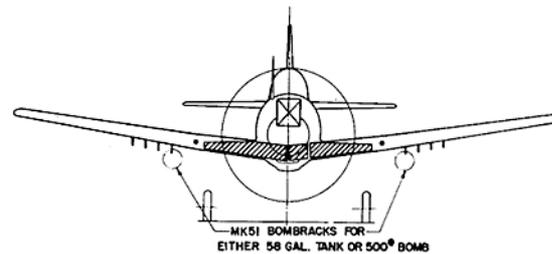
DESCRIPTIVE ARRANGEMENT

BUREAU OF AERONAUTICS
NAVY DEPARTMENT

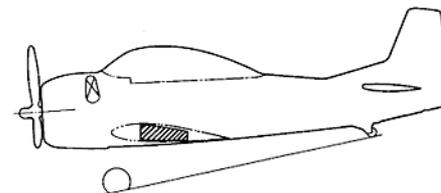
BLADDER TYPE TANKS
 NON SELF-SEALING TANKS



2 x .50 CAL. GUNS 200 RDS. AMM. PER GUN



MK51 BOMBBRACKETS FOR
EITHER 58 GAL. TANK OR 500# BOMB



0 5 10 FT.
SCALE

ARMAMENT & TANKS

MISSION AND DESCRIPTION

The XSN2J-1 is an intermediate and advanced trainer intended for post-primary and basic training in tactics, instrument flying, dive-bombing, gunnery, rocket firing, and carrier qualifications.

It is a conventional design, two place tandem, all metal, land-plane.

It can be operated from ordinary landing fields or from the deck of an airplane carrier with or without catapulting. It is equipped with dive brakes.

DIMENSIONS

WING AREA.....303 sq. ft.
SPAN.....42'-11"
LENGTH.....33'-10"
HEIGHT.....12'- 1"
TREAD.....12'- 6"
M.A.C.....87.88"

WEIGHTS

Loadings	Lbs.	L.F.
EMPTY.....	6,050.....	
BASIC.....	6,402.....	
DESIGN.....	8,626.....	7.5
MAX.T.O.....	9,370.....	6.6
MAX.LAND.....	9,370.....	

All weights are actual.

FUEL AND OIL

Gals.	No. Tanks	Location
260	3	Fuselage
116	2	Tip,drop

FUEL GRADE.....91/98
FUEL SPEC.....AN-F-48

OIL

CAPACITY (Gals.).....18
GRADE.....1120
SPEC.....AN-O-8

ELECTRONICS

RANGE RECEIVER.....AN/ARC-5
RADIO.....AN/ARC-2
HOMING RECEIVER.....AN/ARR-2A
MARKER BEACON REC....AN/ARN-8

POWER PLANT

NO. & MODEL.....(1) R-1820-78
MFR.....Wright
SUPERCH.....1 Stage, 2 Speed
PROP. GEAR RATIO.....0.666
PROP. MFR.....Ham. Std.
PROP. DES. NO.....6547A-12
NO. BL/DIA.....3/10'-7"

RATINGS

Bhp @ Rpm @ Alt.

T.O.	1,100	2,500	S.S.L.
MIL.	1,100	2,500	7,000
	900	2,500	18,000
NORM.	1,000	2,300	6,500
	850	2,300	17,500
SPEC. NO. N834			

ORDNANCE**GUNS**

No.	Size	Location	Rds.
2	.50 cal.	Wing	200

(Space provisions for additional 200 rds.)

BOMBS

Type	Size	Location	No.
Bomb	500 #	Wing	2

ROCKETS

Type	Size	Location	No.
HVAR	5"	Wing	8

FIRE CONTROL

Sight.....Mk. 8
MAX. BOMB CAP.....1,000 Lbs.



PERFORMANCE SUMMARY

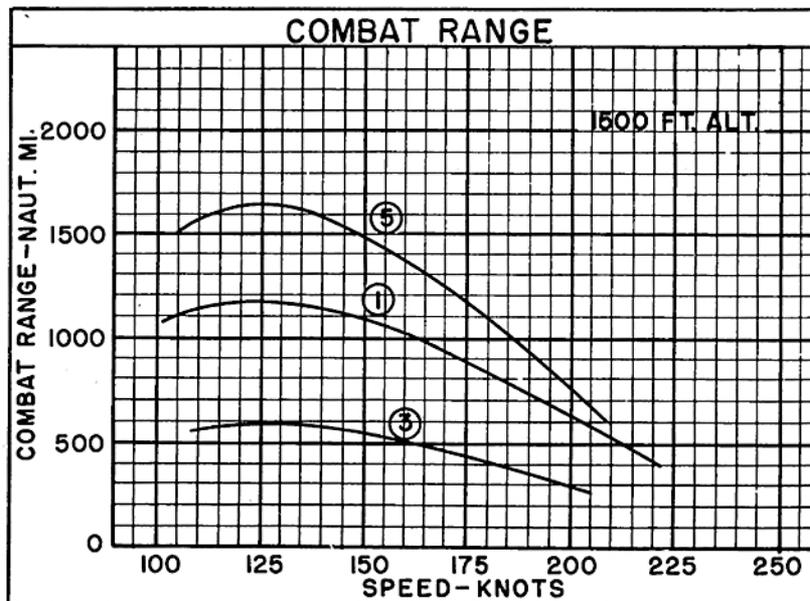
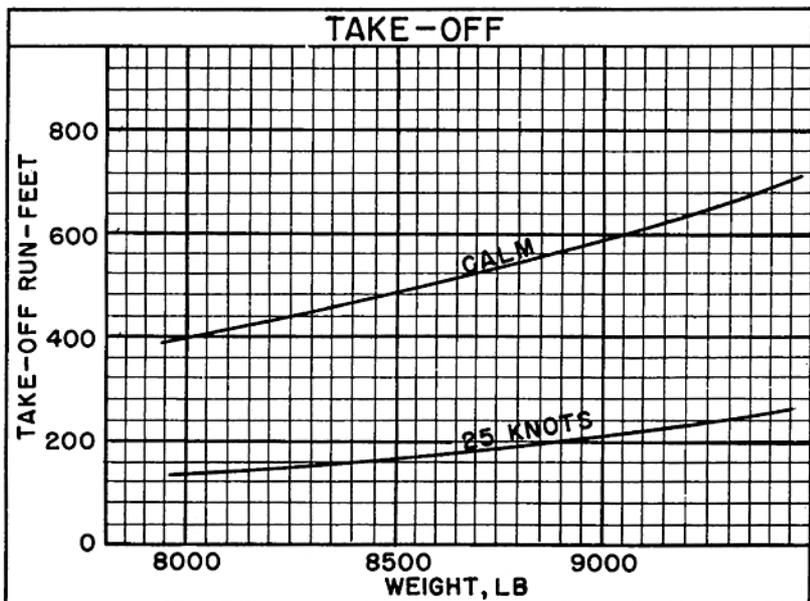
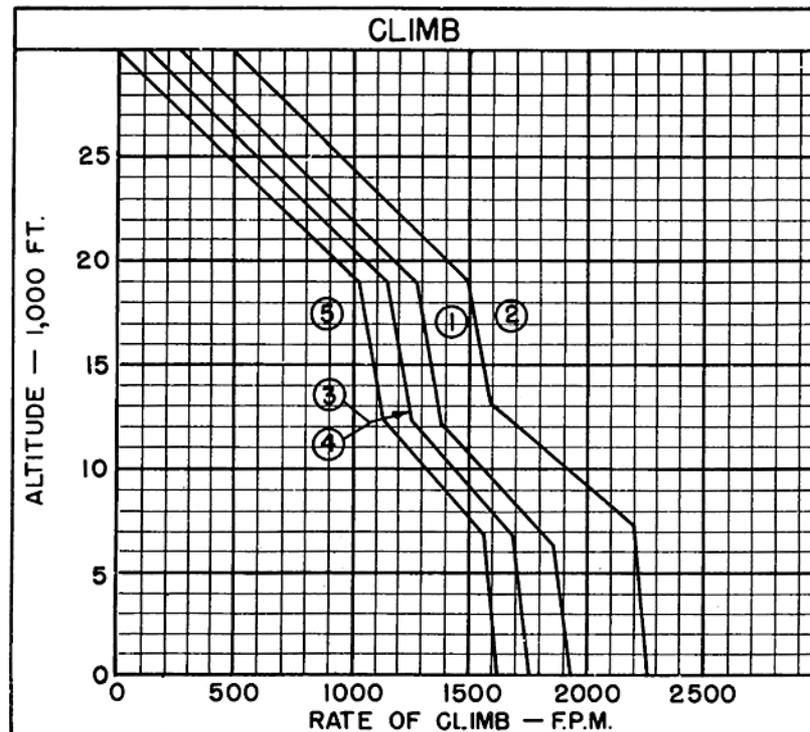
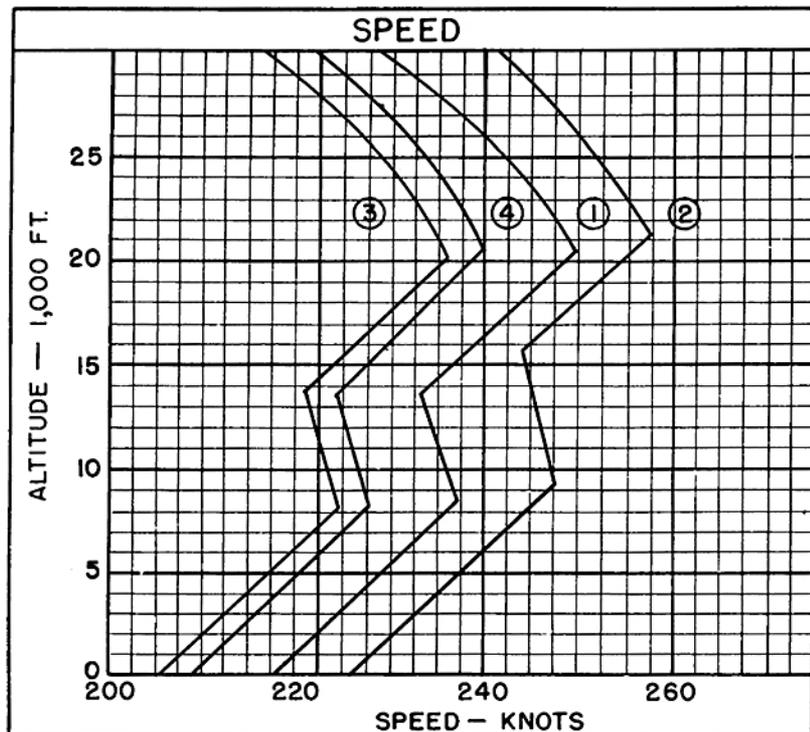
LOADING CONDITION		(1) TRAINER	(3) TRAINER 2 - 500# Bombs	(4) TRAINER 8 - 5" HVAR	(5) TRAINER 2-58 Gal.Tanks
TAKE-OFF WEIGHT	lbs.	8,508	8,869	8,870	9,370
Fuel	lbs.	1,560	936	828	1,560/696
Bombs	lbs.		1,000		
Wing/Power Loading (A)	lbs/sq.ft;lbs/bhp.	28.1/10.0	29.3/10.4	29.3/10.4	31.0/11.0
Stall Speed--Power off	kn.	63.8	65.1	65.1	66.9
Stall Speed--Power off - No Fuel	kn.	57.6	61.5	62.0	58.4
Stall Speed--Power on	kn.	56.5	59.0	58.5	60.0
Maximum Speed/Alt (B)	kn/ft.	249/20,500	236/20,100	239/20,500	239/20,500
Take-off Distance, deck -- calm	ft.	512	597	597	695
Take-off Distance, deck 25kn.	ft.	176	216	216	260
Take-off Distance, Airport	ft.				
Rate of climb -- sea level (B)	ft/min.	1,920	1,740	1,750	1,610
Service Ceiling (B)	ft.	31,600	30,000	30,000	28,800
Time-to-climb 10,000 ft. (B)	min.	5.6	6.1	6.1	6.5
Time-to-climb 20,000 ft. (B)	min.	13.0	14.3	14.3	15.7
Combat Range/V av 1,500	ft. n.mi/kn.	1,190/128	610/125	540/125	1,650/124
Combat Radius/V av	ft. n.mi/kn.				
LOADING CONDITION		(2) TRAINER			
GROSS WEIGHT	lbs.	7,884			
Engine power		Military			
Fuel	lbs.	936			
Bombs/Tanks					
Max. speed at sea level	kn.	226			
Max. speed/Alt	kn/ft.	257/21,400			
Combat speed/Alt	kn/ft.	229/1,500			
Rate of climb SL	ft/min.	2,250			
Ceiling for 500 fpm R/C	ft.	30,000			
Time-to-climb/Alt.	min/ft.				

NOTES

- (A) BHP at Maximum Critical Altitude
(B) Normal BHP

Performance is based on flight test of XSN2J-1 airplane.

Range is based on engine specification fuel consumption data increased by 5%.



○ LOADING CONDITION COLUMN NUMBER