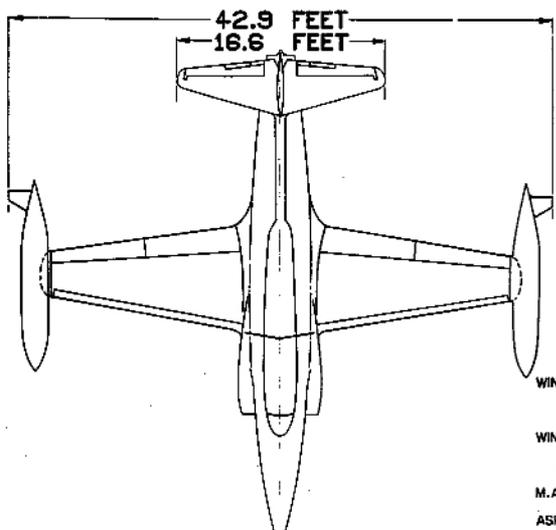


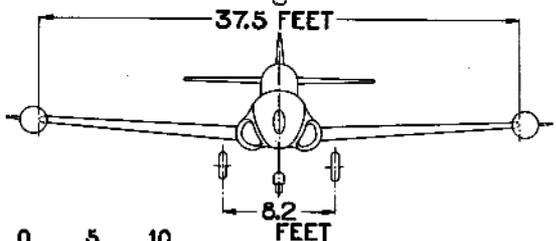
STANDARD AIRCRAFT CHARACTERISTICS

T2V - 1

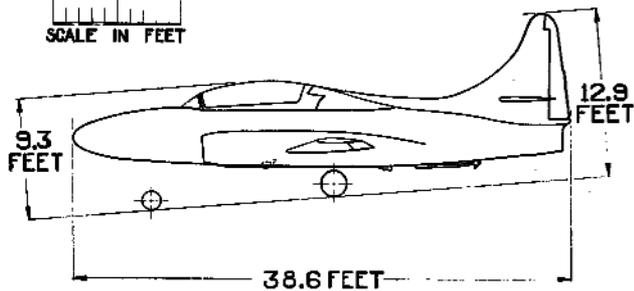
LOCKHEED



WING AREA (INCLUDING FUSELAGE PORTION) - 232.6 SQ. FT.
 WING SECTION -
 NACA - 65-213₂ - 5
 M.A.C. - 80.6
 ASPECT RATIO - 606

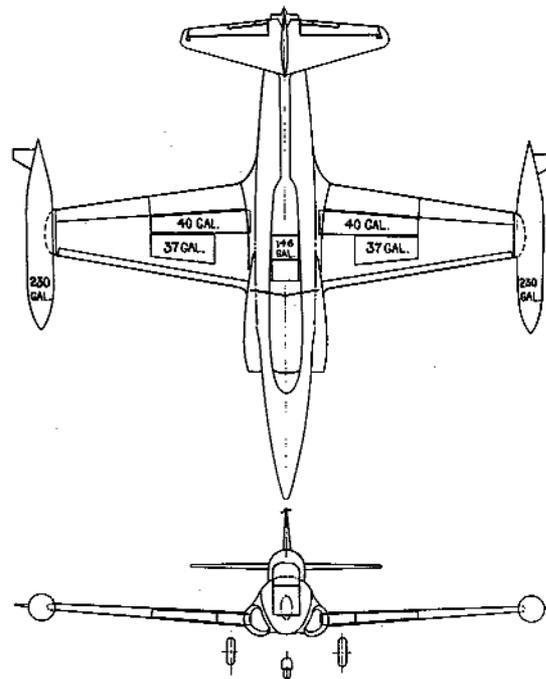


0 5 10
 SCALE IN FEET

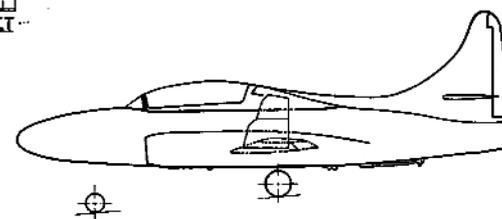


DESCRIPTIVE ARRANGEMENT - MODEL T2V1

ARMAMENT AND TANKAGE T2V1



0 5 10
 SCALE IN FEET



ALL TANKS ARE NON SELF-SEALING
 NOTE:

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

POWER PLANT

NO. & MODEL.....(1) J33-A-24
 MFR.....Allison
 TYPE.....Centrifugal
 LENGTH.....107"
 DIAM.....50"
 AUGMENTATION.....None

RATINGS

	LBS.	@	RPM	@	ALT.
MIL.	6,100		11,800		S.S.L.
NORM.	5,050		11,200		S.S.L.

SPEC. NO. 405

ORDNANCE

NONE

MISSION AND DESCRIPTION

The T2V-1 is a two-place single engine trainer designed for land or carrier base operations. The primary mission is to train pilots in aerobatics, confidence maneuvers, instrument flying and carrier landing and take-off operations.

Design features include fully automatic leading edge slats and single-slotted trailing edge flaps with blowing system boundary layer control. The airplane has fixed wing tip tanks, arresting hook and catapult equipment.

DEVELOPMENT

First Flight.....1 January 1956
 Service Use.....1 January 1957

DIMENSIONS

WING
 AREA.....233 sq. ft.
 SPAN.....37' - 7"
 MAC.....6' - 9"
 SWEEPBACK($\frac{1}{4}$ chord).....none
 LENGTH.....38' - 6"
 HEIGHT.....12' - 10"
 TREAD.....8' - 2"

WEIGHTS

LOADING	LBS.	L.F.
EMPTY.....	11,129.....	
BASIC.....	11,342.....	
DESIGN.....	17,000.....	7.33
COMBAT.....	14,730.....	
MAX. T.O. (Field).....	16,705.....	
(Cat.).....	16,705.....	
MAX. LAND (Field).....	14,235.....	
(Arrest).....	14,235.....	

ALL WEIGHTS ARE ESTIMATED

FUEL AND OIL

NO. TANKS	TOT. GALS.	LOCATION
4	154	Wing
1	146	Fuselage
2	460	Wing Tip

FUEL GRADE.....JP-4
 FUEL SPEC.....MIL-F-5624B

OIL

CAPACITY (Gals).....3
 GRADE.....1010
 SPEC.....MIL-O-60E1A

ELECTRONICS

Automatic Direction Finder.....AN/ARA-25
 UHF Command.....AN/ARC-27A
 Marker Beacon Rec.....AN/ARN-12
 Radio Compass Rec.....AN/ARN-6
 VHF Navigation Rec.....AN/ARN-14E
 TACAN.....AN/ARN-21
 Glide Path Rec.....AN/ARN-18
 Identification Radar.....AN/APX-6B
 Coder.....AN/APA-89
 Interphone.....AN/AIC-10
 Radar Altimeter.....AN/APN-22
 Range Receiver.....R-23A/AKC-5

PERFORMANCE SUMMARY

TAKE-OFF LOADING CONDITION		(1) TRAINER	(2) FIGHTER (Simulated)		
TAKE-OFF WEIGHT	lb.	16,705	16,705		
Fuel	lb. JP-4	4,940	4,940		
Fayload	lb.	NONE	NONE		
Wing loading	lb./sq.ft.	71.8	71.8		
Stall speed - power-off	kn.	106.4	106.4		
Take-off run at S.L. - calm	(B) ft.	2,550	2,550		
Take-off run at S.L. -- kn. wind	ft.	---	---		
Take-off to clear 50 ft. - calm	(B) ft.	3,800	3,800		
Max. speed/altitude	(A) kn./ft.	485/SL	485/SL		
Rate of climb at S.L.	(A) fpm.	5,500	5,500		
Time: S.L. to 20,000 ft.	(A) min.	4.4	4.4		
Time: S.L. to 30,000 ft.	(A) min.	7.8	7.8		
Service ceiling (100 fpm)	(A) ft.	44,800	44,800		
Combat range	n.mi.	790	790		
Average cruising speed	kn.	392	392		
Cruising altitude(s)	ft.	41,000/44,500	41,000/44,500		
Combat radius	n.mi.	260	260		
Average cruising speed	kn.	392	392		
Mission time	hrs.	1.4	1.7		
COMBAT LOADING CONDITION			(3) CLEAN		
COMBAT WEIGHT	lb.		14,730		
Engine power			Military		
Fuel	lb.		2,965		
Combat speed/combat altitude	kn./ft.		443/35,000		
Rate of climb/combat altitude	fpm/ft.		2,150/35,000		
Combat ceiling (500 fpm)	ft.		45,000		
Rate of climb at S.L.	fpm.		6,300		
Max. speed at S.L.	kn.		485		
Max. speed/altitude	kn./ft.		443/35,000		
LANDING WEIGHT	lb.	12,685	12,685		
Fuel	lb.	920	920		
Stall speed - power-off	kn.	92.8	92.8		
Stall speed - with approach power	kn.	90.9/86.9(C)	90.9/86.9(C)		

NOTES

(A) Military Rated Thrust

(B) Without Boundary Layer Control

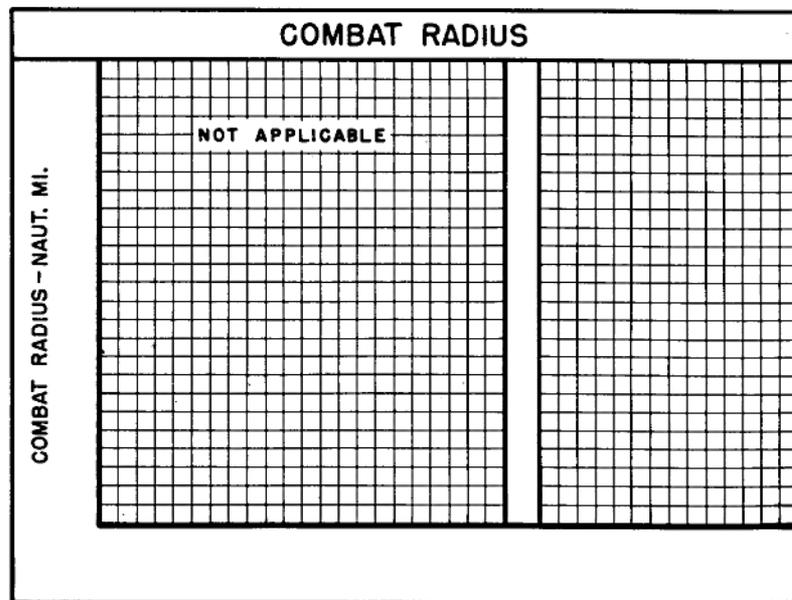
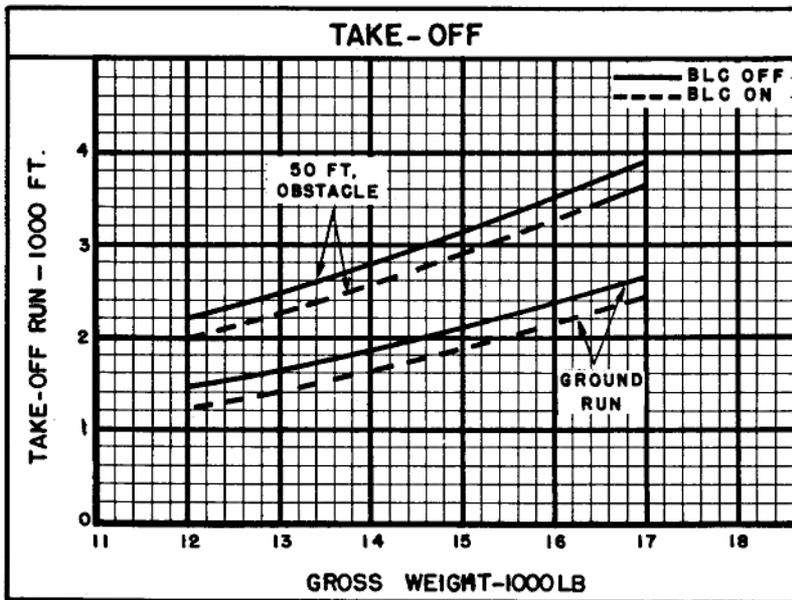
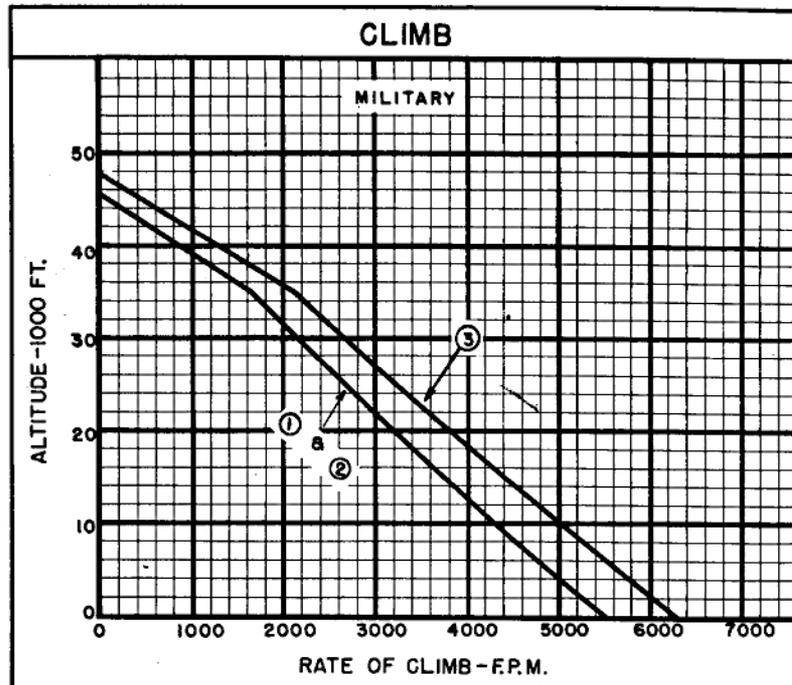
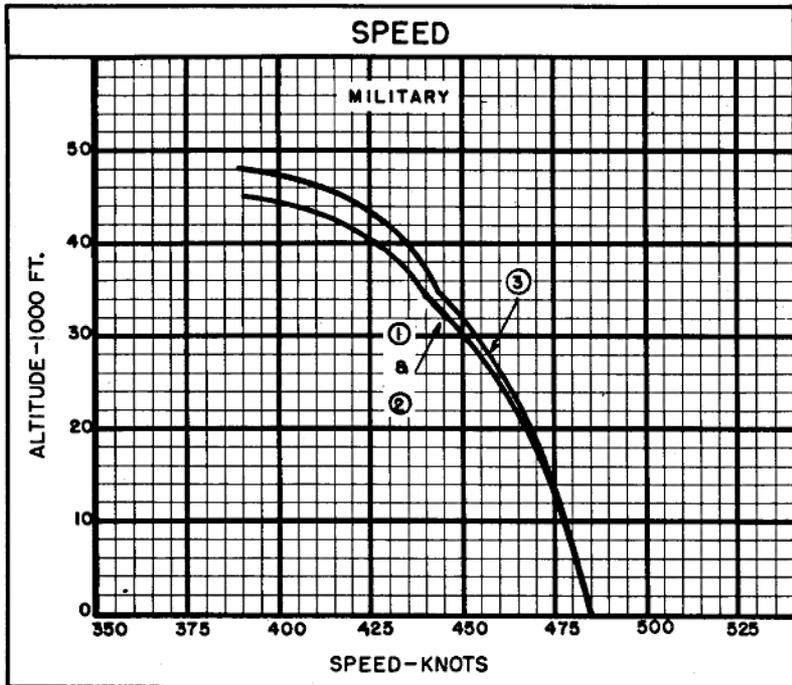
(C) With Boundary Layer Control

PERFORMANCE BASIS: Flight test on F-80C & calculations.

RANGE AND RADIUS are based on engine specification fuel consumption increased 5%.

SPOTTING: A total of 61 airplanes can be accommodated in a landing spot on the flight hangar decks of a CVA-19 angled deck carrier.

REASON FOR REISSUE: To reflect change in stall speeds due to decreased leading edge slat extension. Preliminary NATC flight test take-off distances agree closely with calculated data, therefore previous take-off distances are unchanged.



○ LOADING CONDITION COLUMN NUMBER

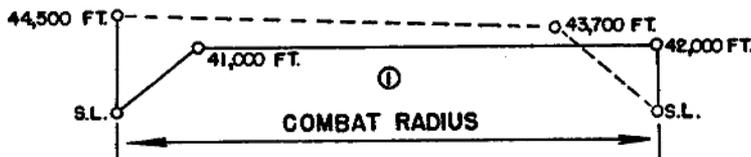
Standard Aircraft Characteristics NAVAER 1335E (Rev. 1-55)

NOTES

COMBAT RADIUS - TRAINER (GAS TURBINE)

TAKE-OFF, ACCELERATE TO CLIMB SPEED: 5 minutes at normal rated thrust at Sea Level.
 CLIMB: With military rated thrust to altitude for best cruise.
 CRUISE-OUT: At speed for long range at cruise-climb altitudes.
 LAND: At sea level base - no distance gained - no fuel used.
 TAKE-OFF, ACCELERATE TO CLIMB SPEED: 5 minutes at normal rated thrust at Sea Level.
 CLIMB: With military rated thrust to altitude for best cruise.
 CRUISE-BACK: At speed for long range at cruise-climb altitudes.
 RESERVE: 20 minutes at maximum endurance speed at Sea Level plus 5% of initial fuel load.

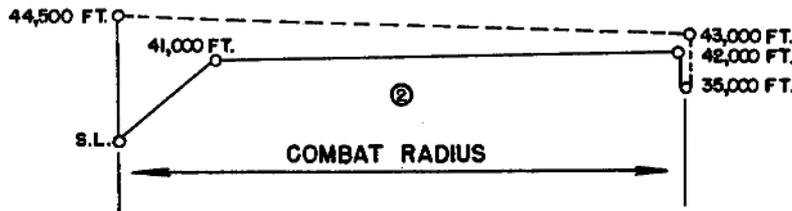
$$\text{COMBAT RADIUS} = \text{CLIMB} + \text{CRUISE-OUT} + \text{CLIMB} + \text{CRUISE-BACK}$$



MISSION TIME = TOTAL TIME WHERE DISTANCE IS GAINED PLUS COMBAT IF APPLICABLE

COMBAT RADIUS - GENERAL PURPOSE FIGHTER (GAS TURBINE)

TAKE-OFF, ACCELERATE TO CLIMB SPEED: 5 minutes at normal rated thrust at Sea Level.
 CLIMB: With military rated thrust to altitude for best cruise.
 CRUISE-OUT: At speed for long range at cruise-climb altitudes.
 COMBAT: 20 minutes with military thrust at 35,000 ft. (end combat at initial cruise-back altitude).
 CRUISE-BACK: At speed for long range at cruise-climb altitudes.
 RESERVE: 20 minutes at maximum endurance speed at Sea Level plus 5% of initial fuel load.



○ LOADING CONDITION COLUMN NUMBER