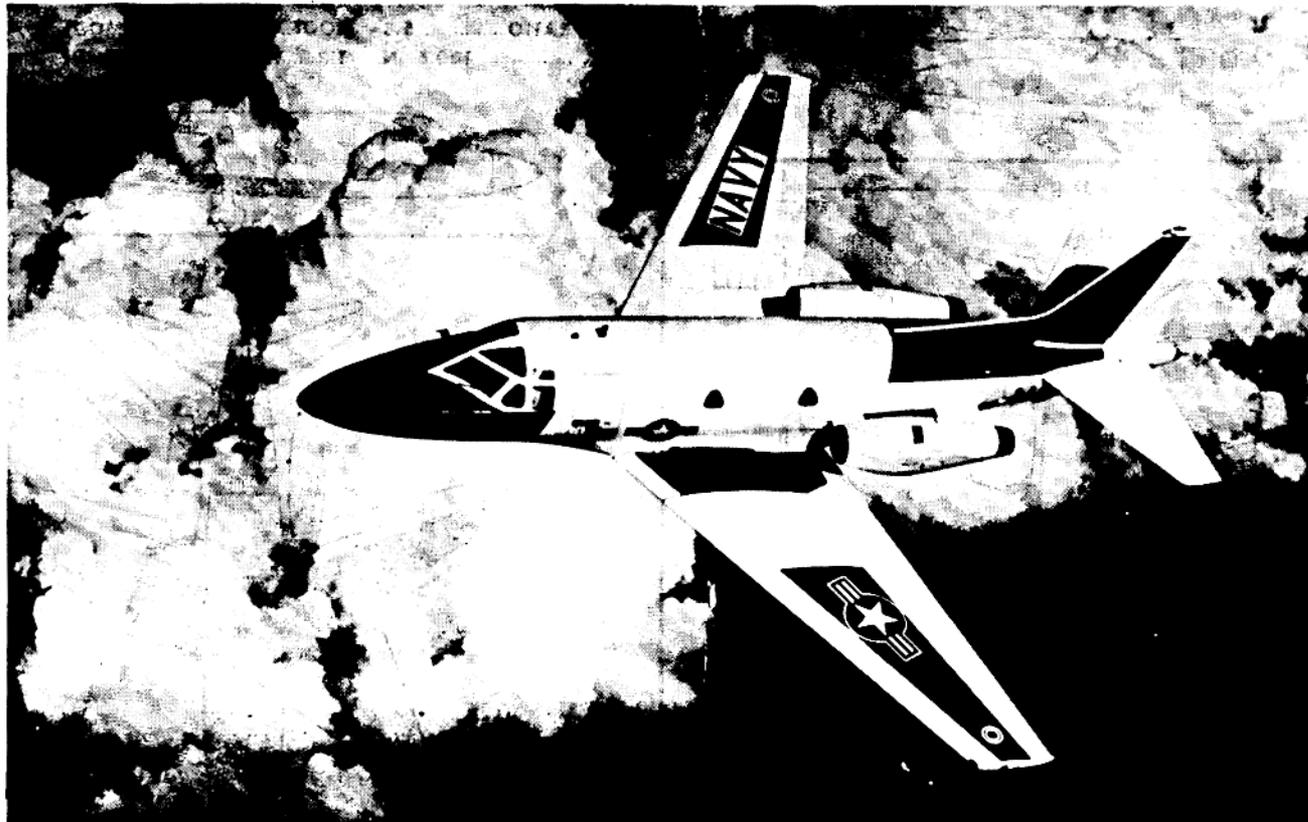


REPORT NO. NA-62-554

SERVICE



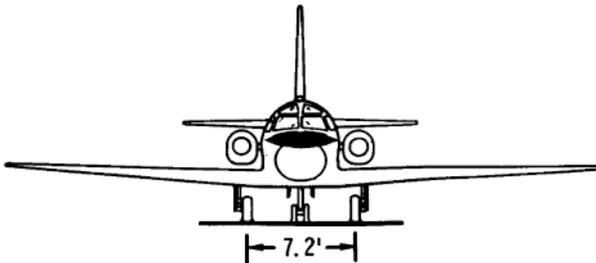
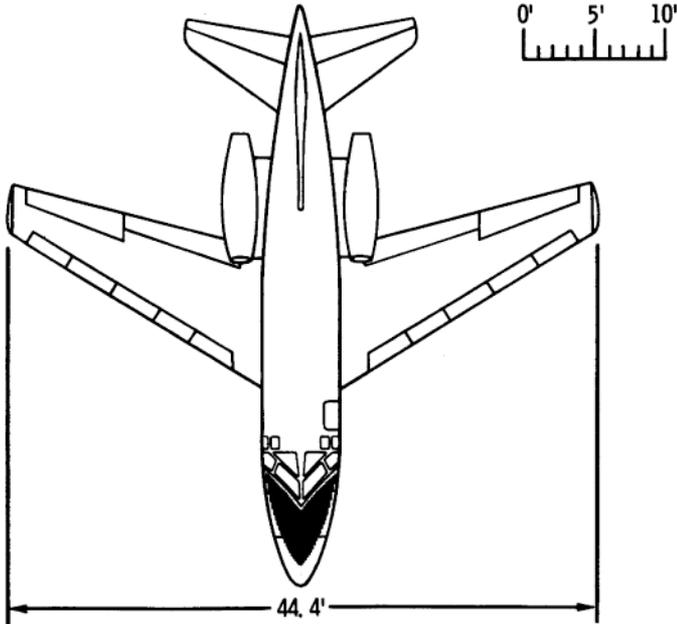
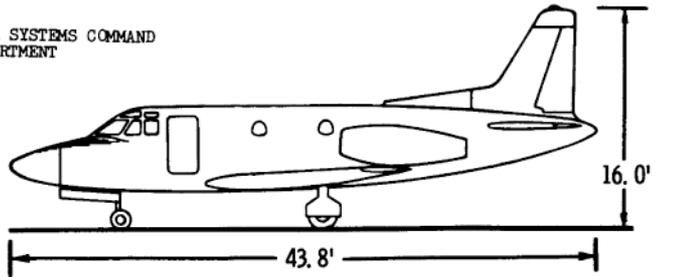
# STANDARD AIRCRAFT CHARACTERISTICS

## T-39D

NORTH AMERICAN AVIATION, INC

**SERVICE**

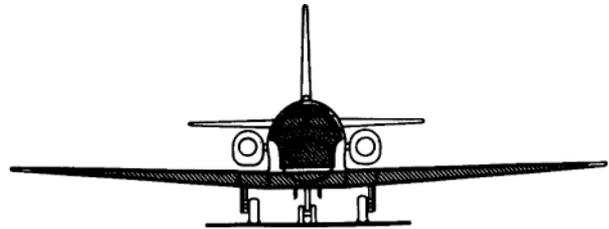
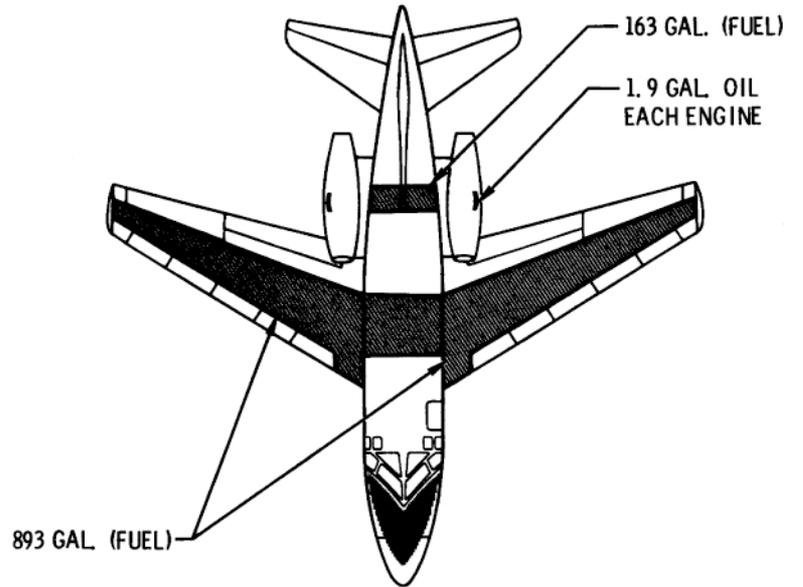
NAVAL AIR SYSTEMS COMMAND  
NAVY DEPARTMENT



**DESCRIPTIVE ARRANGEMENT**

NAVAL AIR SYSTEMS COMMAND  
NAVY DEPARTMENT

**WING AREA...342.1 SQ FT**    **WING SECTION**  
**ASPECT RATIO..... 5.8**    **ROOT..NACA 64A212(MOD)**  
**M.A.C. .... 100.6 IN.**    **TIP.....NACA 64A012(MOD)**

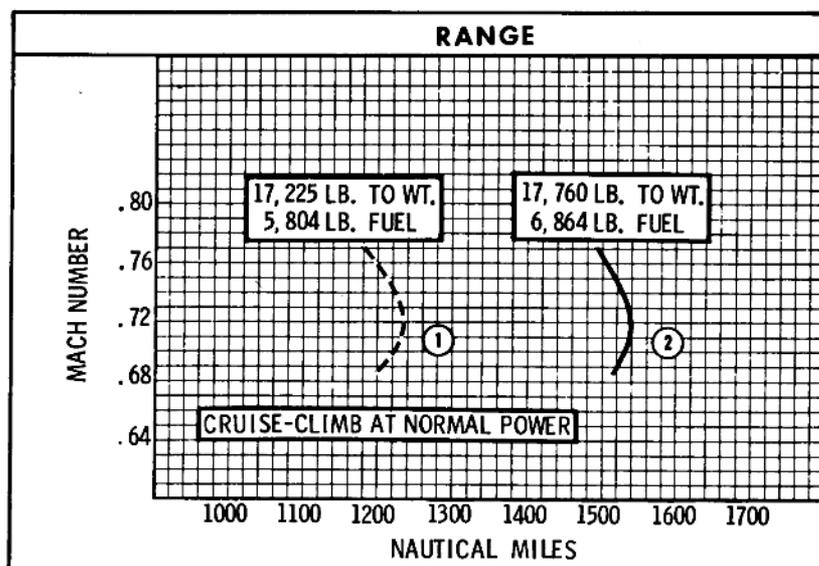
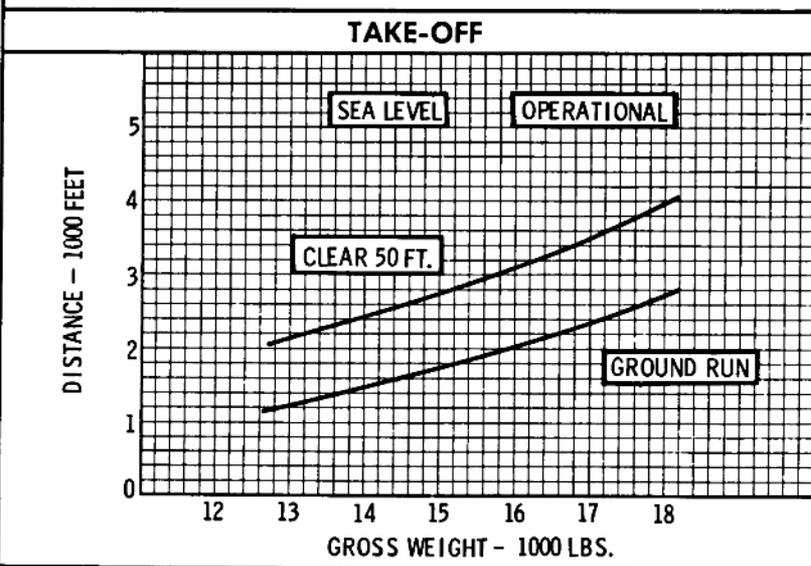
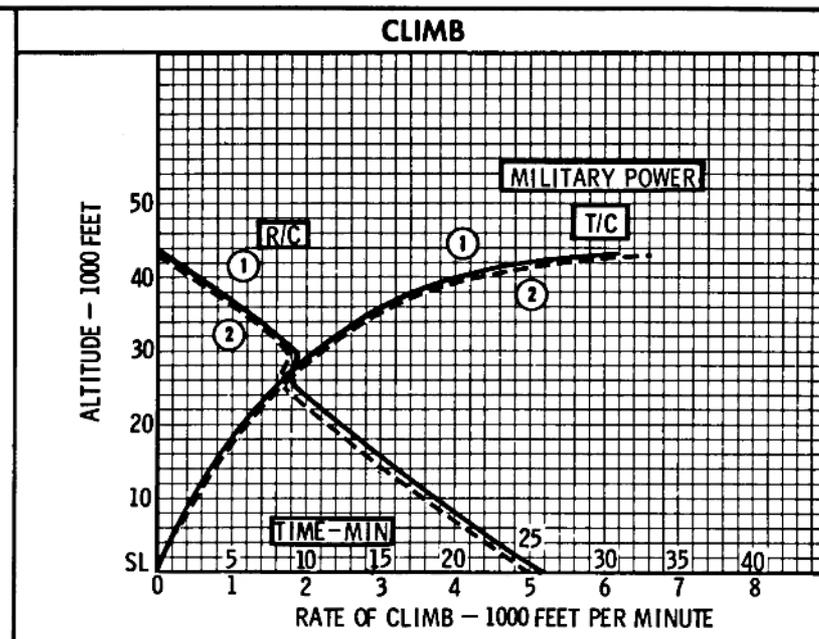
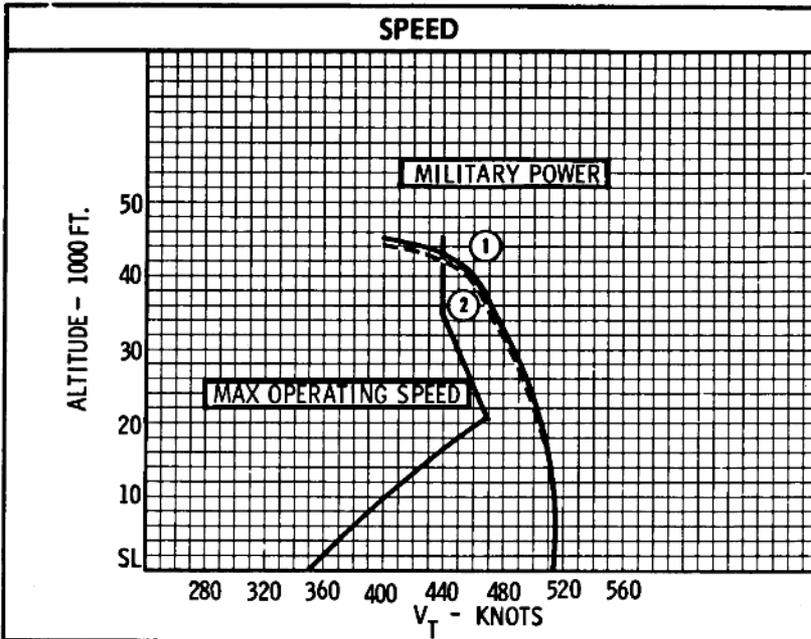


**ARMAMENT AND TANKAGE**

T-39D

POWER PLANT	MISSION AND DESCRIPTION	WEIGHTS																																																
<p>No. &amp; Model . . . . . (2) J60-P-3A                      Mfr. . . . . Pratt &amp; Whitney                      Engine Spec. No. . . . . A-2412 E                      Type . . . . . Axial Turbojet                      Length . . . . . 76.0 in.                      Diameter . . . . . 21.4 in.                      Weight (Dry) . . . . . 448 lb.                      Tail Pipe . . . . . Fixed Area                      Augmentation . . . . . None</p> <p style="text-align: center;"><b>RATINGS</b></p> <table border="1"> <thead> <tr> <th>S. L. S.</th> <th>LB.</th> <th>RPM</th> <th>MIN.</th> </tr> </thead> <tbody> <tr> <td>Max:</td> <td>3000</td> <td>16,200</td> <td>30</td> </tr> <tr> <td>Normal:</td> <td>2570</td> <td>15,360</td> <td>Cont.</td> </tr> </tbody> </table>	S. L. S.	LB.	RPM	MIN.	Max:	3000	16,200	30	Normal:	2570	15,360	Cont.	<p>Air Force Equivalent: T-39B      Mfr's Model: NA-277</p> <p>The primary mission of this airplane will be flight training in radarscope interpretation.</p> <p>Special features of this airplane are aerodynamically balanced control surfaces, hydraulically operated speed brake, and automatic leading edge slats. The crew will consist of a pilot and a copilot (main student). Provisions are made in the aft cabin for an instructor, two standby students, and a navigators station. The airplane is designed in conformance with FAA certification procedures.</p> <p>The cabin and cockpit are pressurized to 8000-foot-cabin altitude for an airplane altitude from 8000 feet to 45,000 feet. Adequate heating and air conditioning is provided for cabin and cockpit.</p> <p>Structural design maximum dive speed is 508 knots EAS.</p>	<table border="1"> <thead> <tr> <th>Loading</th> <th>LB.</th> <th>L. F.</th> </tr> </thead> <tbody> <tr> <td>Empty</td> <td>10,250</td> <td></td> </tr> <tr> <td>Basic</td> <td>10,341</td> <td></td> </tr> <tr> <td>Performance</td> <td>*14,930</td> <td>3.5</td> </tr> <tr> <td>Max Design Flt.</td> <td></td> <td></td> </tr> <tr> <td>Basic Mission</td> <td>16,870</td> <td>3.5</td> </tr> <tr> <td>Extended Range</td> <td>17,375</td> <td>2.5</td> </tr> <tr> <td>Max T. O.</td> <td>17,760</td> <td></td> </tr> <tr> <td>Design Landing</td> <td>13,000</td> <td></td> </tr> </tbody> </table> <p>* For Basic Mission</p>	Loading	LB.	L. F.	Empty	10,250		Basic	10,341		Performance	*14,930	3.5	Max Design Flt.			Basic Mission	16,870	3.5	Extended Range	17,375	2.5	Max T. O.	17,760		Design Landing	13,000										
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○ LOADING CONDITION COLUMN NUMBER

## NOTES

FORMULA: RANGE MISSION ① ②

Take-off with military power; climb on course to initial cruise altitude with military power; cruise-climb to 45,000 feet with normal power at .76 M; cruise at .76 M at 45,000 feet. Range free allowances include 5 minutes normal power at sea level for fuel used in starting engines and take-off, and a reserve equal to 30 minutes loiter at sea level at speeds for maximum endurance plus 5% of initial fuel.

GENERAL DATA:

(a) Engine values shown under Power Plant are guaranteed values. Installed values used in performance calculations are as follows:

(2) J60-P-3A		
S. L. STATIC	LB	RPM
Mil:	2920	16,010
Nor:	2525	15,310

PERFORMANCE BASIS

North American Report No. NA-59-390 "Aerodynamic and Thermodynamic Data for a Twin Engine Turbojet Utility Trainer with a Pratt & Whitney J60 Engine (NAA Designation NA-265)," Appendix I, dated 20 June 1962.

North American Report No. NA-62-137 "FAA Type Inspection Report, Model NA-265."

○ LOADING CONDITION COLUMN NUMBER