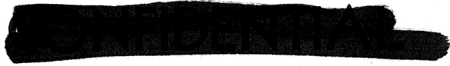


UNCLASSIFIED

NAVAIR 00-110AA7-4



GROUP 4 DOCUMENT  
DECLASSIFIED AFTER 12 YEARS  
DOD DIR 5200.10

# Standard Aircraft Characteristics

## NAVY MODEL

## A-7E

## AIRCRAFT

(TITLE UNCLASSIFIED)

CLASSIFICATION (CANCELED) (~~CHANGED TO~~) BY AUTHORITY OF

A1a-7142  
ON 9-1-87 C. V. Melton  
(DATE) (SIGNATURE) (RANK)

NAVAL AIR SYSTEMS COMMAND  
DEPARTMENT OF THE NAVY

CLEARED  
FOR OPEN PUBLICATION  
SEP 8 1987  
COMNAVAIRSYSCOM

*This publication shall not be carried in aircraft on combat missions or when there is a reasonable chance of its falling into the hands of an unfriendly nation, unless specifically authorized by the "Operational Commander."*

PUBLISHED BY DIRECTION OF THE  
COMMANDER OF THE NAVAL AIR SYSTEMS COMMAND

NOTICE—This document contains information affecting the national defense of the United States within the meaning of the Espionage Laws, Title 18, U. S. C., Sections 793 and 794. The transmission or the revelation of its contents in any manner to an unauthorized person is prohibited by law.

**DECLASSIFIED**



R/N 624005

UNCLASSIFIED

APRIL 1972

UNCLASSIFIED

NAVAIR OO-110AA7-4

Reproduction for non-military use of the information or illustrations contained in this publication is not permitted without specific approval of the issuing service (NAVAIR or USAF). The policy for use of Classified Publications is established for the Air Force in AFR 205-1 and for the Navy in Navy Regulations, Article 1509.

— LIST OF CHANGED PAGES ISSUED —

INSERT LATEST CHANGED PAGES. DESTROY SUPERSEDED PAGES.

NOTE: The portion of the text affected by the current change is indicated by a vertical line in the outer margins of the page.

\* The asterisk indicates pages changed, added or deleted by the current change.

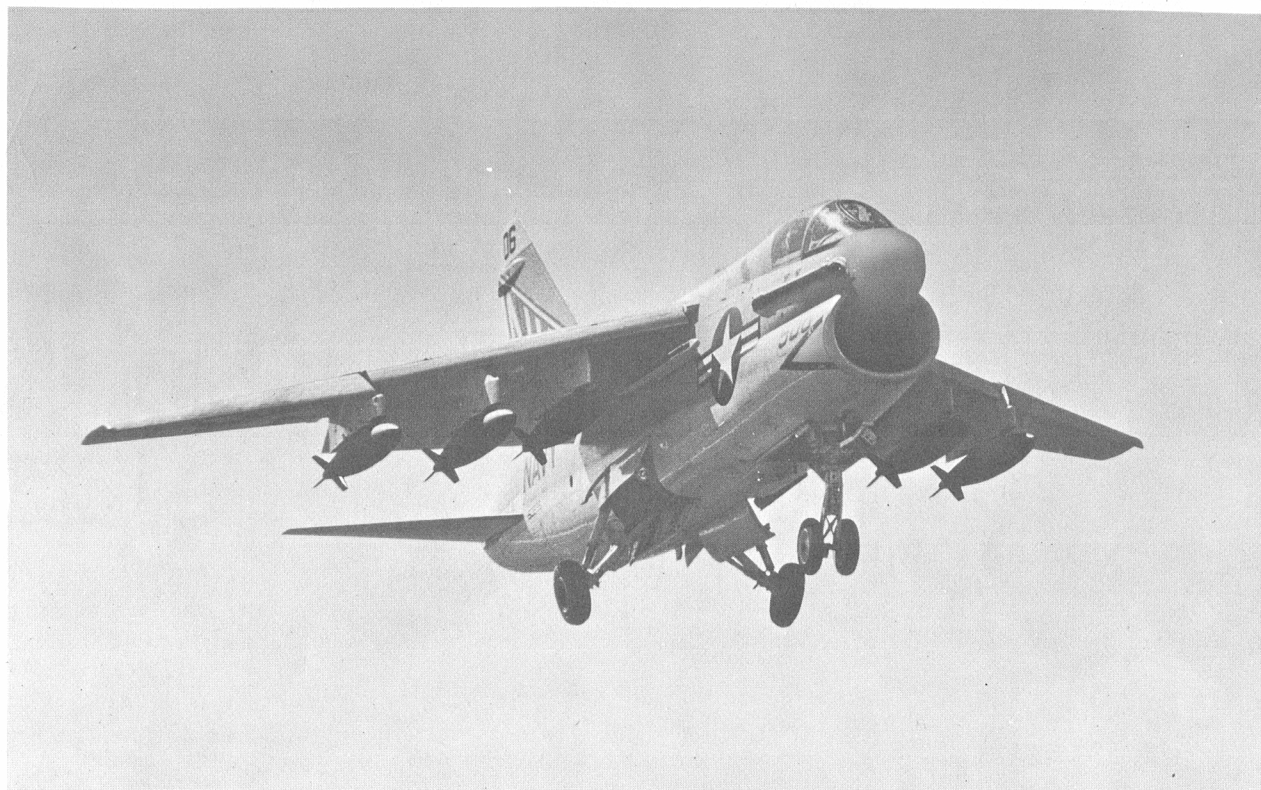
ADDITIONAL COPIES OF THIS PUBLICATION MAY BE OBTAINED AS FOLLOWS:

NAVAIR

ASAF ACTIVITIES.—In accordance with Technical Order No. 00-5-2.

NAVY ACTIVITIES.—Use DD FORM 1348 and submit in accordance with the instructions contained in NAVSUP PUBLICATION 437—Military Standard Requisitioning and Issue Procedures.

For information on other available material and details of distribution refer to NAVSUP PUBLICATION 2002, SECTION VIII and NAVAIR 00-500A.



STANDARD AIRCRAFT CHARACTERISTICS, NAVWEPS FORM 13100/4D (Rev. 7-65)

# STANDARD AIRCRAFT CHARACTERISTICS

**A-7E**

(ALLISON TF41-A-2 ENGINE)



**VOUGHT  
AERONAUTICS**

**DECLASSIFIED**

UNCLASSIFIED

APRIL 1972

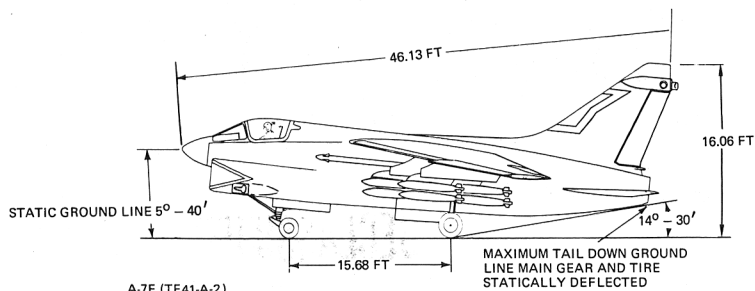
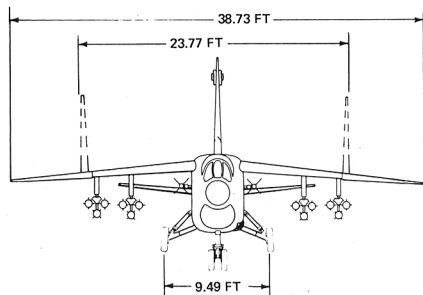
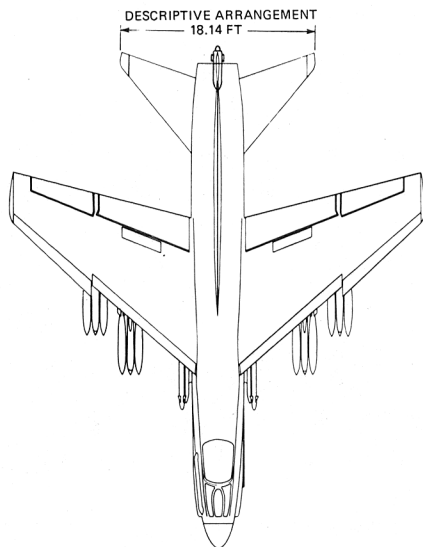
[REDACTED]  
A-7E

UNCLASSIFIED

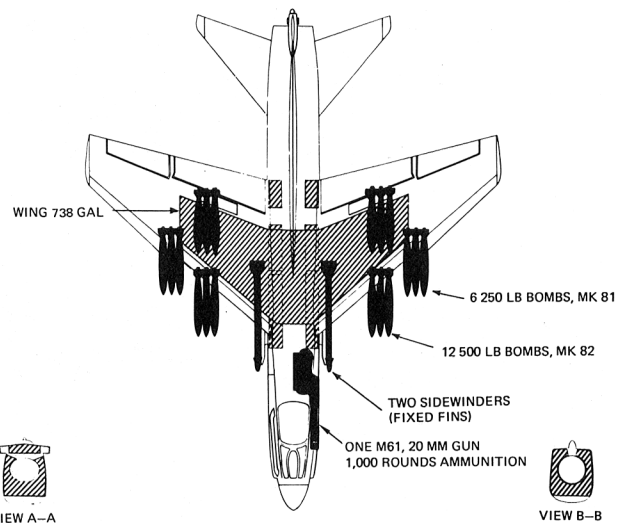
DECLASSIFIED

NAVAIR OO-110AA7-4

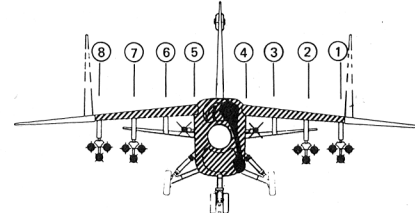
SERVICE



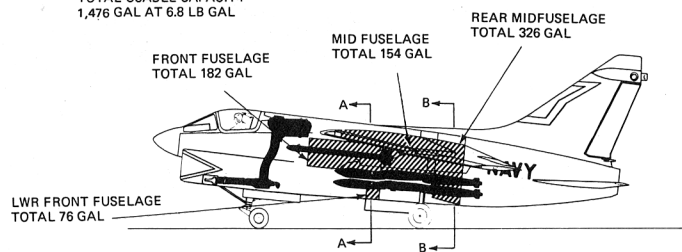
ARMAMENT AND TANKAGE



WET PYLONS - 1 AND 3, 6 AND 8



ARMAMENT  
FUEL CELLS  
TOTAL USABLE CAPACITY  
1,476 GAL AT 6.8 LB GAL



STANDARD AIRCRAFT CHARACTERISTICS, NAVWEPS FORM 13100/4F (Rev. 7-65)

A-7E

APRIL 1972

UNCLASSIFIED

DECLASSIFIED

UNCLASSIFIED

NAVAIR OO-110AA7-4

SERVICE

STANDARD AIRCRAFT CHARACTERISTICS, NAVWEPS FORM 13100/4A (Rev. 7-65)

ELECTRONICS	MISSION AND DESCRIPTION	WEIGHTS																																																													
<p>Communications Encoder Juliet 28</p> <p>Heading Mode System</p> <p>Data Link AN/ASW-25A</p> <p>UHF Radio Receiver-Transmitter AN/ARC-51A</p> <p>Radio Set Control C-8191/ARC</p> <p>Switching Unit SA-1652/ARC</p> <p>Freq Channel Ind ID-1660/ARC</p> <p>UHF ADF AN/ARA-50</p> <p>UHF Receiver AN/ARR-69A</p> <p>Doppler Radar System AN/APN-190(V)</p> <p>Radar Beacon AN/APN-154</p> <p>2-Inch Remote Attitude IND System</p> <p>Air Data Computer CP-953/AJQ</p> <p>IFT Transponder AN/APX-72</p> <p>TACAN AN/ARN-52(V)</p> <p>Intercom AN/AIC-25</p> <p>Automatic Flight Control System AN/ASW-30(V) 1</p> <p>Roll/Pitch Trim System</p> <p>Nose Gear Steering System</p> <p>Approach Power Compensating System AN/ASN-54 (V)</p> <p>Angle-of-Attack System</p> <p>Head-Up Display AN/AVQ-7 (V)</p> <p>Radio Command Control Transmitter AN/ARW-77</p> <p>Forward-Looking Radar AN/APQ-126(V)</p> <p>Electrical Fusing System AN/AWW-2B</p> <p>Armament Monitor and Control A/A24B-4 (V)</p> <p>Shrike Signal Conditioner (SIDS)</p> <p>Radar Altimeter AN/APN-141(V)</p> <p>Inertial Measurement Set AN/ASN-90(V)</p> <p>Nav/WD Digital Computer AN/ASN-91(V)</p> <p>Armament Stations Control Unit C-8185/AWE</p> <p>Interference Blanker MX-8253/A</p> <p>Destruct Initiator MX-7832/ASQ</p> <p>Destruct Battery</p> <p>Countermeasures Receiver-Transmitter AN/ALQ-100</p> <p>ECM Warning Receiver AN/APR-27</p> <p>ECM Warning Receiver AN/APR-25(V)</p> <p>Countermeasures Dispenser Set AN/ALE-29A</p> <p>Integrated ECM Control</p> <p>Projected Map Display Set AN/ASN-99</p> <p>ADS (Altitude Reporting)</p> <p>AAU-19 Servoed Altimeter</p> <p>AIMS</p> <p>MK 12 Computer KIT-1/TSEC</p> <p>Inflight Monitor TS 1843/APX</p> <p>Indicator AAU-19/A</p>	<p>The A-7E (TF41-A-2) is a single-place, carrier-based, turbofan, light attack airplane developed from the A-7E (TF30-P-8). The airplane is designed to provide high attack utility and flexibility for close support and interdiction missions by virtue of a large number of external store stations to provide ordnance loading capacity and freedom of ordnance choice, a large internal fuel capacity to make external fuel unnecessary for most missions, while retaining a maximum number of stations for armament, an excellent over-load capability in terms of wind-over-deck requirements, flying qualities, and structural integrity. Features to expedite maintenance and airplane turnaround are important A-7E design characteristics.</p> <p>The A-7E has fixed wing incidence and a high-lift system composed of leading edge flaps and single slotted trailing edge flaps. Lateral control is provided by outboard ailerons and inboard spoilers. Superior stability and control qualities over the entire aircraft speed envelope, including transonic, are features of the A-7E.</p> <p>A stick steering autopilot is provided to augment the weapon system capability. An approach power compensator provides automatic speed control for carrier landing.</p> <p>In addition to the basic A-7B features, the A-7E provides a high accuracy flexible weapons delivery system, an M61 Vulcan cannon, a head-up display to aid the pilot during weapons delivery, enroute, and terrain following and landing modes.</p> <p>Weapon delivery improvements include a new all-weather type radar, digital weapon delivery and navigation computer, inertial quality platform, head-up display, projected map display, a new air data computer, and a new roll stabilized doppler radar system.</p> <h3 data-bbox="1209 876 1456 917">POWER PLANT</h3> <p>Engine . . . . . TF41-A-2 (68 and Subsequent)</p> <p>Type . . . . . Turbofan</p> <p>Manufacturer . . . . . Allison</p> <p>Length . . . . . 185.36 Inches</p> <p>Diameter . . . . . 37.18 Inches</p> <p>Specification . . . . . 798 (26 Jan 1969)</p> <p>Compressor and Fan . . . . . Axial Flow</p> <p>Tail Pipe Nozzle . . . . . Fixed</p> <p>Specification Thrust Ratings (Sea Level Static)</p> <p>Intermediate . . . . . 15,000 Pounds (30 Minute Limit)</p> <p>Max. Continuous . . . . . 12,950 Pounds</p> <h3 data-bbox="1209 1218 1433 1258">DIMENSIONS</h3> <p>Wing:</p> <p>Area . . . . . 375 Sq Ft</p> <p>Span: Maximum . . . . . 38.73 Ft</p> <p>          Folded . . . . . 23.77 Ft</p> <p>Aspect Ratio . . . . . 4</p> <p>Sweep 1/4 Chord . . . . . 35°</p> <p>MGC . . . . . 130.08 In</p> <p>Length . . . . . 46.13 Ft</p> <p>Height . . . . . 16.06 Ft</p> <p>Maximum Tread . . . . . 9.49 Ft</p>	<p style="text-align: right;">TF41-A-2</p> <p style="text-align: center;"><u>Loading</u>                      <u>Pounds</u></p> <p>Empty . . . . . 18,546</p> <p>Basic . . . . . 19,576*</p> <p>Design . . . . . 29,575</p> <p>Combat (Clean A/P) . . . . . 25,834*</p> <p>Max T.O. (Overload) . . . . . 42,000</p> <p>Max T.O. (Normal) . . . . . 37,279*</p> <p>Max Ldg (Carrier) . . . . . 25,300</p> <p style="text-align: right;">*Includes 652 pounds Special Equipment</p> <h3 data-bbox="1769 527 2016 568">FUEL AND OIL</h3> <table border="1" data-bbox="1646 568 2128 860"> <thead> <tr> <th>Gal</th> <th>No. Tanks</th> <th>Location</th> <th>Self-Sealing</th> </tr> </thead> <tbody> <tr> <td colspan="4" style="text-align: right;">Main Cluster:</td> </tr> <tr> <td colspan="4">Fuselage</td> </tr> <tr> <td>182</td> <td>2</td> <td>Left and Right Forward</td> <td>No</td> </tr> <tr> <td>154</td> <td>2</td> <td>Mid</td> <td>No</td> </tr> <tr> <td>76</td> <td>1</td> <td>Main Sump</td> <td>Yes</td> </tr> <tr> <td>326</td> <td>1</td> <td>Fuselage: Aft Bladder Transfer System</td> <td>Partial</td> </tr> <tr> <td colspan="4">Wing: Integral Transfer System</td> </tr> <tr> <td>738</td> <td>1</td> <td></td> <td>No</td> </tr> <tr> <td colspan="4" style="border-top: 1px solid black;">1,476</td> </tr> </tbody> </table> <p>Usable Fuel Capacity . . . . . 1,476 Gal</p> <p>Fuel Specification . . . . . MIL-J-5624F</p> <p>Fuel Grade . . . . . JP-5</p> <p style="text-align: center;">OIL</p> <p>Engine Oil Tank (total) . . . . . 3.5 Gal (useable) 3.1 Gal</p> <p>Oil Specification . . . . . MIL-L-23699</p> <h3 data-bbox="1769 1071 1993 1112">ORDNANCE</h3> <table border="1" data-bbox="1646 1112 2128 1445"> <thead> <tr> <th>No.</th> <th>Description</th> <th>Location</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>20 MM Aircraft Gun, M61</td> <td>Lower Front Fuselage</td> </tr> <tr> <td>500</td> <td>(Normal) Rounds of 20 MM Ammunition</td> <td></td> </tr> <tr> <td>1,000</td> <td>(Max)</td> <td></td> </tr> <tr> <td colspan="3" style="text-align: center;"><u>External</u></td> </tr> <tr> <td>2</td> <td>Fuselage Pylons for Single Sidewinders (360-lb capacity)</td> <td></td> </tr> <tr> <td>6</td> <td>Wing Mounted Pylons (3 per side), 4 - 3,500-lb capacity (2 wet), 2 - 2,500-lb capacity (wet)</td> <td></td> </tr> </tbody> </table>	Gal	No. Tanks	Location	Self-Sealing	Main Cluster:				Fuselage				182	2	Left and Right Forward	No	154	2	Mid	No	76	1	Main Sump	Yes	326	1	Fuselage: Aft Bladder Transfer System	Partial	Wing: Integral Transfer System				738	1		No	1,476				No.	Description	Location	1	20 MM Aircraft Gun, M61	Lower Front Fuselage	500	(Normal) Rounds of 20 MM Ammunition		1,000	(Max)		<u>External</u>			2	Fuselage Pylons for Single Sidewinders (360-lb capacity)		6	Wing Mounted Pylons (3 per side), 4 - 3,500-lb capacity (2 wet), 2 - 2,500-lb capacity (wet)	
Gal	No. Tanks	Location	Self-Sealing																																																												
Main Cluster:																																																															
Fuselage																																																															
182	2	Left and Right Forward	No																																																												
154	2	Mid	No																																																												
76	1	Main Sump	Yes																																																												
326	1	Fuselage: Aft Bladder Transfer System	Partial																																																												
Wing: Integral Transfer System																																																															
738	1		No																																																												
1,476																																																															
No.	Description	Location																																																													
1	20 MM Aircraft Gun, M61	Lower Front Fuselage																																																													
500	(Normal) Rounds of 20 MM Ammunition																																																														
1,000	(Max)																																																														
<u>External</u>																																																															
2	Fuselage Pylons for Single Sidewinders (360-lb capacity)																																																														
6	Wing Mounted Pylons (3 per side), 4 - 3,500-lb capacity (2 wet), 2 - 2,500-lb capacity (wet)																																																														

APRIL 1972

A-7E

UNCLASSIFIED

UNCLASSIFIED

DECLASSIFIED

## SERVICE

NAVAIR OO-110AA7-4

TAKEOFF LOADING CONDITION		① HI-HI-HI MISSION CLEAN AIRPLANE	② PRIMARY ATTACK MISSION 6 MK 81 SNAKEYES	③ PRIMARY ATTACK MISSION 12 MK 81 SNAKEYES	④ 5,000 FT LOITER MISSION 12 MK 82 AND 6 MK 81 BOMBS	⑤ DEEP STRIKE MISSION 1 MK 43 AND 3-300-GAL TANKS	⑥ FERRY MISSION 2-300-GAL TANKS
Takeoff weight	lb	30,131	32,745	34,781	39,465	40,119	34,860
Fuel-internal/external	lb/lb	10,036/0	10,036/0	10,036/0	10,036/0	10,036/6,120	10,036/4,080
Payload <sup>①</sup>	lb	0	1,800	3,600	7,500	2,140	0
Wing loading	lb/sq ft	80.9	87.4	92.8	105.2	107.1	93.0
Stall speed - power off, 25° flap	kn	129.3	136.8	141.2	150.4	151.6	142.5
Takeoff grd run/over 50 ft obs - calm 59°F <sup>②</sup> , SL	ft/ft	2,670/3,710	3,210/4,440	3,670/5,080	4,890/6,800	5,060/7,060	3,680/5,110
Takeoff grd run/over 50 ft obs - calm 89.6°F <sup>②</sup> , SL	ft/ft	3,450/4,870	4,170/5,890	4,770/6,780	6,390/9,260	6,650/9,670	4,790/6,820
Intermediate max speed/altitude	kn/ft	602/SL	567/6,000	561/7,500	503/8,000	548/6,000	575/4,000
Intermediate rate of climb at SL	fpm	9,380	7,430	6,540	5,120	5,510	7,320
Intermediate time: SL to 20,000 ft <sup>③</sup>	min	2.6	3.5	4.3	5.7	5.0	3.5
Intermediate time: SL to 30,000 ft <sup>③</sup>	min	4.4	6.9	9.1	-	11.7	6.7
Intermediate service ceiling (100 fpm)	ft	43,280	37,120	34,750	28,790	31,620	37,750
Combat range	nmi	1,987	1,359	1,167	835	2,269	2,312 <sup>④</sup>
Average cruising speed	kn	480	435	442	402	455	454
Cruising altitude(s)	ft	39,170/44,970	36,180/39,980	34,380/38,920	28,290/31,680	30,110/40,710	35,320/42,850
Combat radius/mission time <sup>⑤</sup>	nmi/hr	894/3.81	488/2.48	432/2.23	256/2.25	916/4.06	-
Average cruising speed	kn	479	408	403	409	461	-
IFR refuel radius <sup>⑥</sup> /mission time <sup>⑥</sup>	nmi/hr	1,522/6.48	1,015/4.87	926/4.43	653/4.21	-	-
Fuel transferred/distance from base	lb/nmi	5,241/978 <sup>⑦</sup>	5,517/735 <sup>⑦</sup>	5,678/659 <sup>⑦</sup>	5,929/515 <sup>⑦</sup>	-	-
Acceleration at CES at 89.6°F <sup>⑧</sup>	ft/sec/sec	6.05	4.80	4.17	3.02	2.86	4.39
COMBAT LOADING CONDITION <sup>⑨</sup>		⑦	⑧	⑨	⑩	⑪	⑫
Combat weight	lb	26,117	28,731	30,767	35,451	33,036	29,214
Engine power		Intermediate	Intermediate	Intermediate	Intermediate	Intermediate	Intermediate
Fuel	lb	6,022	6,022	6,022	6,022	9,694	8,470
Combat speed/combat altitude	kn/ft	572/23,000	560/SL	553/SL	502/5,000	580/SL	-
Rate of climb/combat altitude	fpm/ft	6,780/23,000	8,630/SL	7,920/SL	5,220/5,000	7,840/SL	-
Combat ceiling (500 fpm)	ft	44,490	37,910	35,300	29,210	37,210	39,490
Rate of climb at SL	fpm	10,320	8,630	7,920	5,850	7,840	8,940
Max speed at SL	kn	602	561	553	500	580	574
Max speed/altitude	kn/ft	602/SL	567/6,000	562/7,500	505/10,000	584/5,000	576/6,000
Landing weight <sup>⑬</sup>	lb	21,367	22,211	22,465	23,284	22,816	22,257 <sup>⑭</sup>
Fuel	lb	1,272	1,301	1,320	1,352	1,614	1,513
Stall speed - power off/appr power	kn/kn	106.8/104.6	110.2/107.4	110.7/108.2	112.7/109.8	111.7/108.0	111.9/109.0
Dist grd roll <sup>⑮</sup> /over 50 ft obs <sup>⑯</sup>	ft/ft	3,100/4,055	3,200/4,155	3,230/4,185	3,330/4,285	3,270/4,175	3,210/4,165
Notes:		<p>⑦. Refuel altitude is 34,190 ft.            ⑧. Refuel altitude is 33,660 ft.            ⑨. Refuel altitude is 26,980 ft.            ⑩. 283 lb ammunition retained.            ⑪. External fuel tanks retained. No ammunition carried.            ⑫. Antiskid braking. 40° flap.            ⑬. With 4 300 gallon tanks, range is 2,485 nmi.            ⑭. Combat loading performance includes stores and ammunition.</p>					
①. Payload is droppable ordnance. Does not include 500 rounds of ammunition or external fuel tanks.							
②. Intermediate thrust, 25° flap, .82 CL <sub>max</sub> .							
③. Climb times consider weight reduction due to fuel used.							
④. Mission time excludes time for warmup and takeoff and 20 minute loiter at sea level.							
⑤. Refuel radius is determined with refueling to full internal fuel capacity of 10,036 pounds.							
⑥. Refueling altitude is cruise ceiling with full internal fuel or 35,000 ft.							
⑦. Refuel altitude is 35,000 ft.							

STANDARD AIRCRAFT CHARACTERISTICS, NAVWEPS FORM 13100/4J (Rev. 7-65)

A-7E

4

APRIL 1972

UNCLASSIFIED

UNCLASSIFIED

**SUPPLEMENTARY MISSIONS**

MISSION LOADINGS FUEL - GAL TAKEOFF WT - LB	100 NMI IN AND OUT		200 NMI IN AND OUT		LO-LO-LO		5,000 FT LOITER		HI-HI-HI	
	R/A NMI	• TIME HR	R/A NMI	• TIME HR	R/A NMI	• TIME HR	R/A NMI	• TIME HR	R/A NMI	• TIME HR
1 MK 43 CG-26.06% MGC 1,476 GAL INT 32,573, a = 4.09 FT/SEC <sup>2</sup> •••	586	2.74	450	2.36	356	2.26	556	3.34	801	3.45
1 MK 43 CG-25.60% MGC 1,476 GAL INT 900 GAL EXT 40,119, a = 2.86 FT/SEC <sup>2</sup> •••	952	4.44	848	4.18	576	3.69	901	4.96	1,117	4.97
6 MK 81 SE CG-26.27% MGC 1,496 GAL INT 32,745, a = 4.80 FT/SEC <sup>2</sup>	485	2.47	372	2.16	328	2.21	446	3.01	658	3.04
6 MK 81 SE CG-27.21% MGC 1,476 GAL INT 1,079 GAL EXT 42,000, a = 2.54 FT/SEC <sup>2</sup>	832	4.32	746	4.09	549	3.73	771	4.77	971	4.80
6 MK 82 SE CG-25.87% MGC 1,476 GAL INT 34,371, a = 4.28 FT/SEC <sup>2</sup>	460	2.37	353	2.09	320	2.16	409	2.86	624	2.91
6 MK 82 SE CG-27.27% MGC 1,476 GAL INT 900 GAL EXT •••• 41,945, a = 2.55 FT/SEC <sup>2</sup>	772	3.97	684	3.73	513	3.46	704	4.38	912	4.44
20 MK 82 SE CG-28.17% MGC 1,250 GAL INT •••• 42,000, a = 2.57 FT/SEC <sup>2</sup>	195	1.28	•••••	•••••	196	1.46	86	1.45	299	1.57
12 MK 82 CG-25.11% MGC 6 MK 81 2 MK 84 1,185 GAL INT •••• 42,000, a = 2.48 FT/SEC <sup>2</sup>	184	1.20	•••••	•••••	189	1.38	77	1.40	289	1.54

**NOTES**

- MISSION TIME: EXCLUDES TIME FOR WARMUP AND TAKEOFF AND 20-MINUTE LOITER TIME
- BCS: BEST CRUISE SPEED
- ACCELERATION AFTER CATAPULT AT 0.82 C<sub>L max</sub> AT 89.6° F, INTERMEDIATE THRUST
- PARTIAL FUEL LOAD TO MAINTAIN 42,000 LB MAXIMUM TAKEOFF WEIGHT
- UNABLE TO MAINTAIN MISSION DEFINITION

**DECLASSIFIED**

STANDARD AIRCRAFT CHARACTERISTICS, NAVWEPS FORM 13100/41 (Rev. 7-65)

UNCLASSIFIED

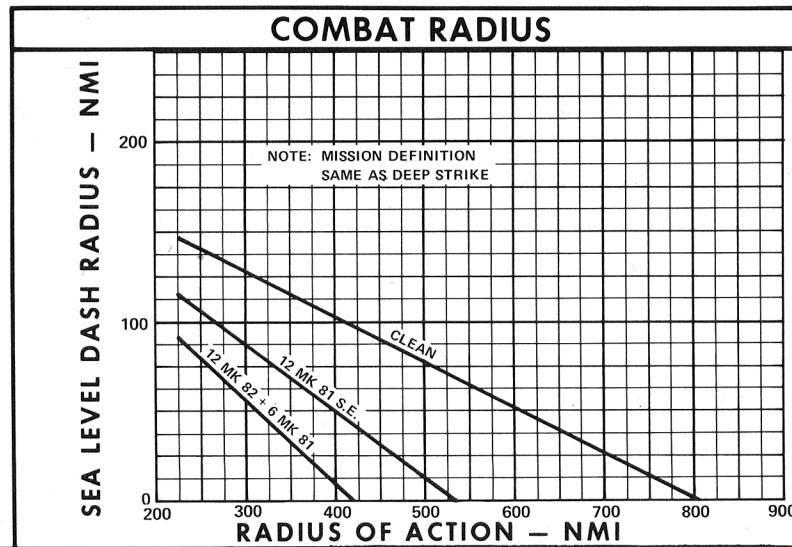
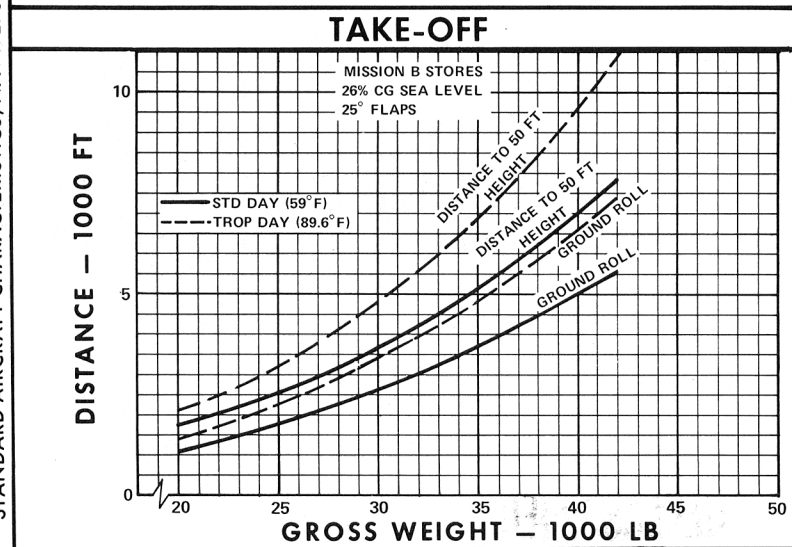
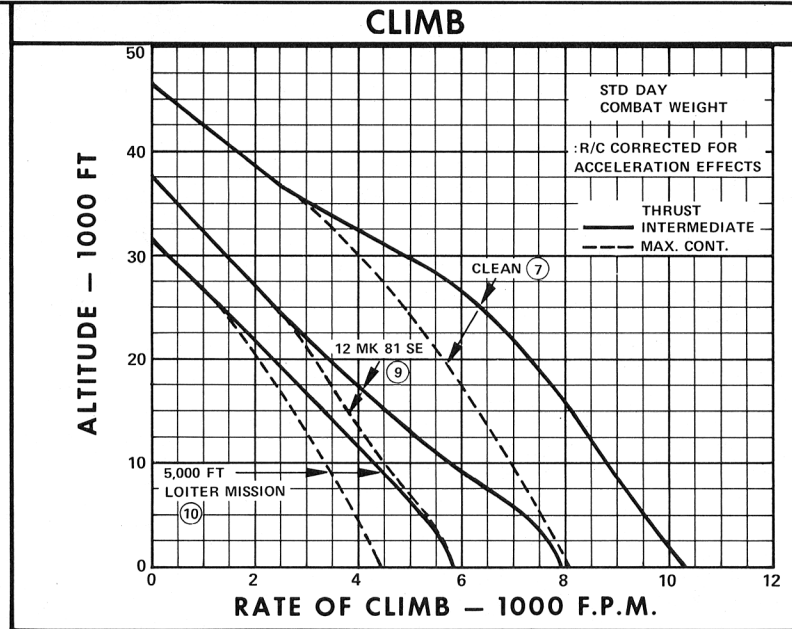
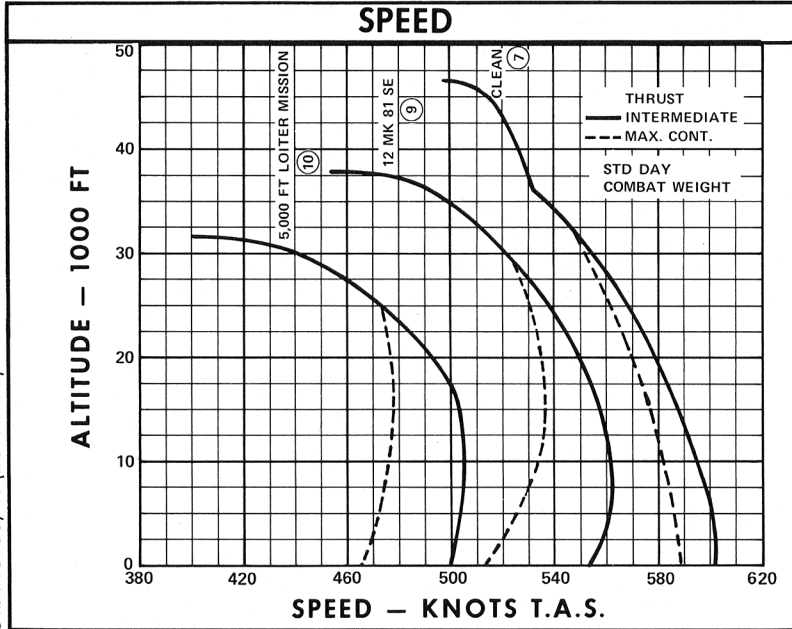
UNCLASSIFIED

DECLASSIFIED

SERVICE

NAVAIR 00-110AA7-4

STANDARD AIRCRAFT CHARACTERISTICS, NAVWEPS FORM 13100/4F (Rev. 7-65)



○ LOADING CONDITION COLUMN NUMBER — TF41-A-2 ENGINE

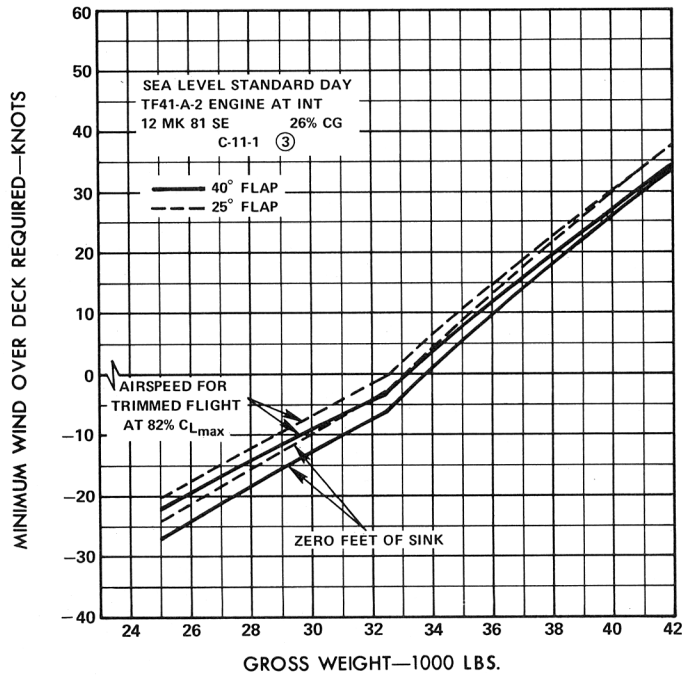
UNCLASSIFIED



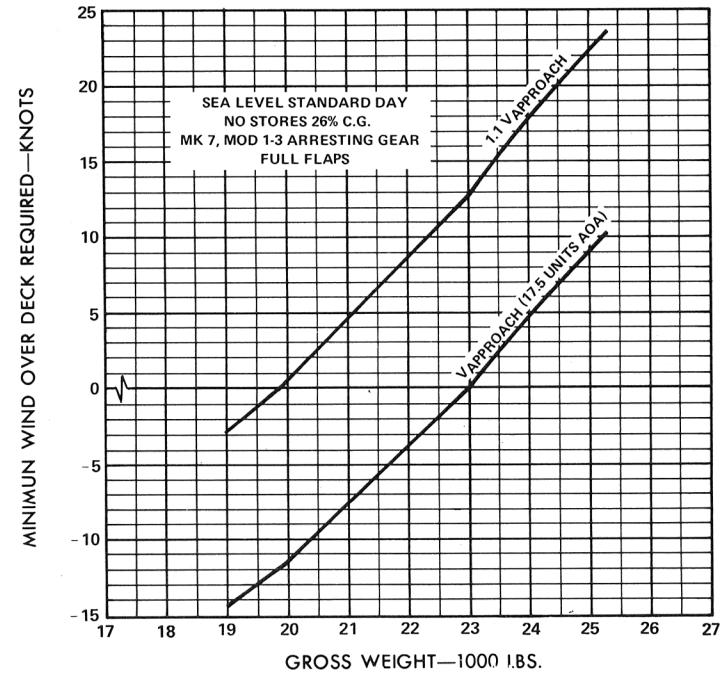
UNCLASSIFIED

# CARRIER SUITABILITY

### MINIMUM WIND OVER DECK REQUIRED FOR CATAPULTING VS. GROSS WEIGHT



### MINIMUM WIND OVER DECK REQUIRED FOR ARRESTING VS. GROSS WEIGHT



STANDARD AIRCRAFT CHARACTERISTICS, NAVWEPS FORM 13100/4H (Rev. 7-65)

DECLASSIFIED

UNCLASSIFIED

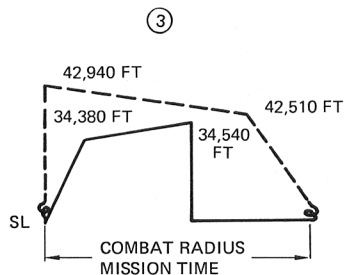
UNCLASSIFIED

SERVICE

NAVAIR OO-110AA7-4

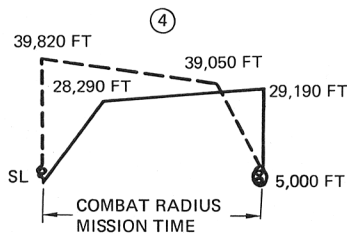
**PRIMARY ATTACK MISSION**  
(12 MK 81 SE)

Warmup, taxi, takeoff: 5 min SL Max Continuous  
Climb: on course to opt cruise alt with Intermediate thrust  
Cruise out: at speed for max range at opt cruise alt  
Descend: to SL (no fuel used, no distance gained)  
Run in: 200 NMI at SL at speed for max range  
Combat: 5 min at Intermediate (stores on, no dist gained) drop bombs  
Climb: on course to opt cruise alt with Intermediate thrust  
Cruise back: at max range speed at opt alt  
Reserve: 5% of initial fuel +20 min at max endurance speed at SL



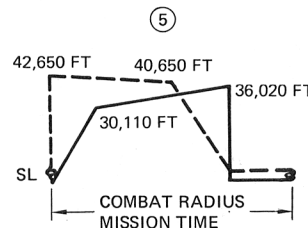
**5000 FT LOITER MISSION**

Warmup, taxi, takeoff: 5 min SL Max Continuous  
Climb: on course to opt cruise alt with Intermediate thrust  
Cruise out: at max range speed at opt cruise alt (drop fuel tanks when empty)  
Descend: to 5,000 ft (no fuel used, no dist gained)  
Loiter: 1 hour at max end. speed (no dist gained) stores dropped at end of loiter  
Climb: on course to opt cruise alt with Intermediate thrust  
Cruise back: at max range speed at opt alt  
Reserve: 5% initial fuel +20 min at max endurance speed at SL



**DEEP STRIKE MISSION**

Warmup, taxi, takeoff: 5 min SL Max Continuous  
Climb: on course to opt cruise alt with Intermediate thrust  
Cruise out: at max range speed at opt cruise alt (drop fuel tanks when empty)  
Descend: to SL when 50 NMI from target (no fuel used, no dist gained)  
Run in: 50 NMI at V<sub>max</sub> at Intermediate  
Combat: 5 min at Intermediate (stores on, no dist gained) drop bombs  
Run out: 50 NMI at V<sub>max</sub> at Intermediate at SL  
Climb: on course to opt cruise alt with Intermediate thrust  
Cruise back: at max range speed at opt alt  
Reserve: 5% initial fuel +20 min at max endurance speed at SL



Note:  
Mission Time: Excludes time for warmup and takeoff and 20-minute loiter time  
Cycle Time: Mission time +20 minutes SL loiter

○ LOADING CONDITION COLUMN NUMBER

DECLASSIFIED

STANDARD AIRCRAFT CHARACTERISTICS, NAVWEPS FORM 13100/4G (Rev. 7-65)

UNCLASSIFIED

DECLASSIFIED

UNCLASSIFIED

STANDARD AIRCRAFT CHARACTERISTICS, NAVWEPS FORM 13100/4G (Rev. 7-65)

HI-LO-LO-HI MISSION

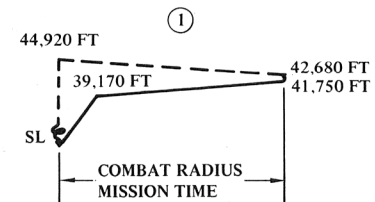
Warmup, taxi, takeoff: 5 min SL Max Continuous  
 Climb: on course to opt cruise alt with Intermediate thrust  
 Cruise out: at max range speed at opt cruise alt (drop fuel tanks when empty)  
 Descend: to SL when 100/200 NMI from target (no fuel used, no dist gained)  
 Cruise: at max range speed at SL (drop fuel tanks when empty)  
 Combat: 5 min at Intermediate (stores on, no distance gained)  
 Drop stores  
 Cruise: at max range speed at sea level  
 Reserve: 5% initial fuel +20 min at max endurance speed at SL

LO-LO-LO MISSION

Warmup, taxi, takeoff: 5 min SL Max Continuous  
 Cruise: at max range speed at SL (drop fuel tanks when empty)  
 Combat: 5 min at Intermediate (stores on, no distance gained)  
 Drop stores  
 Cruise: at max range speed at sea level  
 Reserve: 5% initial fuel +20 min at max endurance speed at SL

HI-HI-HI MISSION

Warmup, taxi, takeoff: 5 min SL Max Continuous  
 Climb: on course to opt cruise alt with Intermediate thrust  
 Cruise out: at max range speed at opt cruise alt (drop fuel tanks when empty)  
 Combat: 5 min at Intermediate (stores on, no dist gained) at alt for max mach no.  
 Drop stores  
 Cruise back: at max range speed at opt alt  
 Reserve: 5% initial fuel +20 min at max endurance speed at SL



Note:  
 Mission Time: Excludes time for warmup and takeoff and 20-minute loiter time  
 Cycle Time: Mission time +20 minutes SL loiter

○ LOADING CONDITION COLUMN NUMBER

UNCLASSIFIED

UNCLASSIFIED  
~~CONFIDENTIAL~~

UNCLASSIFIED  
~~CONFIDENTIAL~~