

~~CONFIDENTIAL~~  
DECLASSIFIED

GROUP 4 DOCUMENT  
DECLASSIFIED AFTER 12 YEARS  
DOD DIR 5200.10

# Standard Aircraft Characteristics

## NAVY MODEL A-4E AIRCRAFT

(TITLE UNCLASSIFIED)

**THIS PUBLICATION SUPERSEDES NAVAIR 00-110A-1 DATED  
1 MAY 1955 IN PART AND ALL ADDENDA THERETO**

*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.

~~CONFIDENTIAL~~  
DECLASSIFIED

1 JULY 1967

UNCLASSIFIED  
NAVAIR 00-110AA4-4

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 DESTROY SUPERSEDED PAGES.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.

UNCLASSIFIED

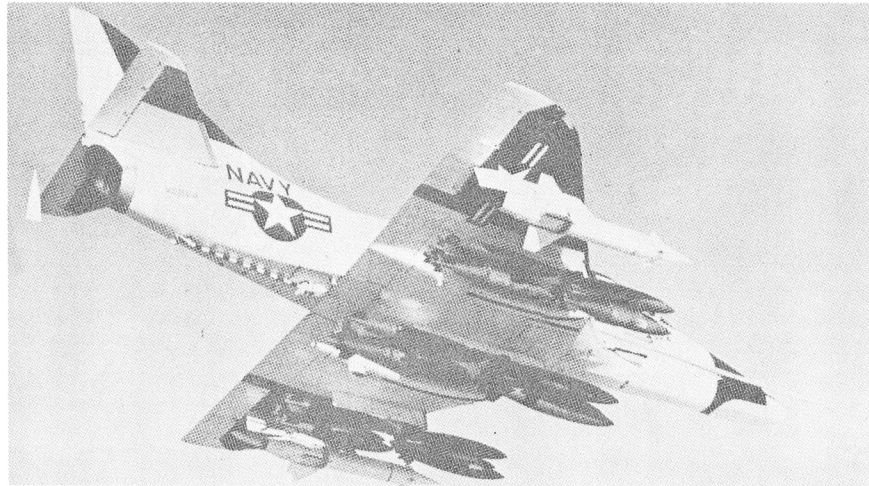
A

DECLASSIFIED

~~CONFIDENTIAL~~

NAVAIR 00-110AA4-4

SERVICE



# STANDARD AIRCRAFT CHARACTERISTICS

A-4E SKYHAWK

DOUGLAS

~~CONFIDENTIAL~~

DECLASSIFIED

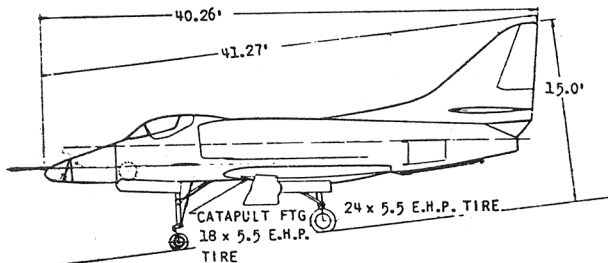
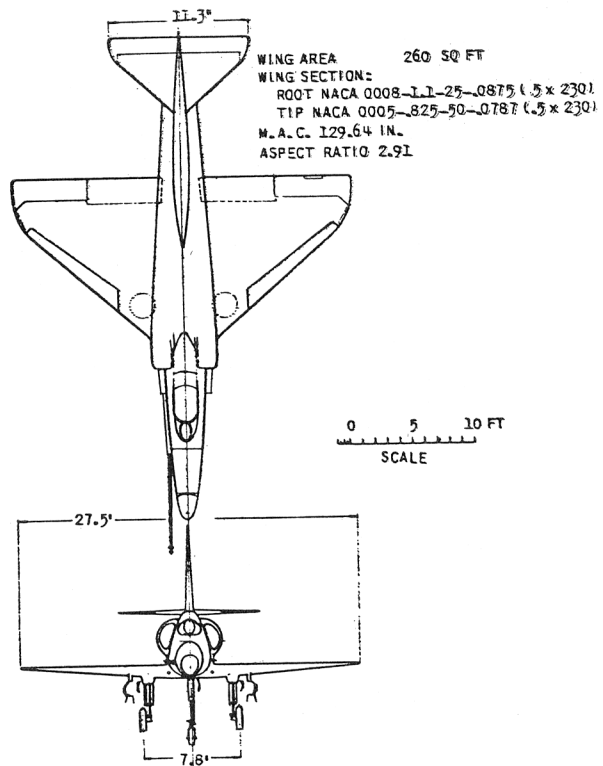
DECLASSIFIED

CONFIDENTIAL

NAVAIR 00-110AA4-4

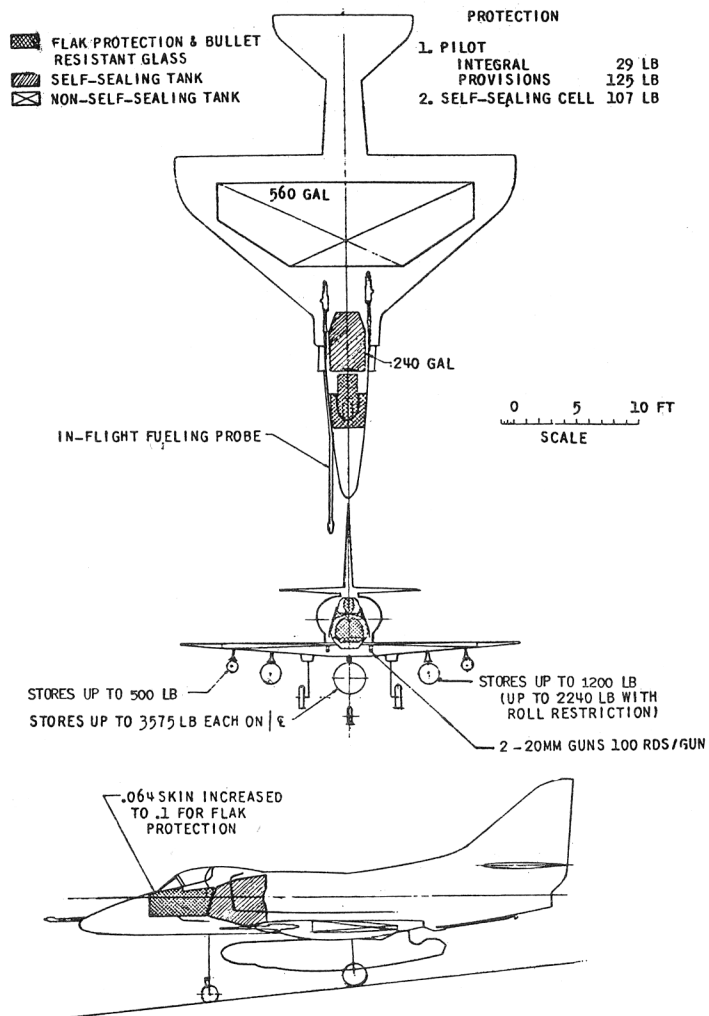
SERVICE

BUREAU OF NAVAL WEAPONS  
NAVY DEPARTMENT



DESCRIPTIVE ARRANGEMENT

BUREAU OF NAVAL WEAPONS  
NAVY DEPARTMENT



ARMAMENT AND TANKAGE

CONFIDENTIAL

DECLASSIFIED

POWER PLANT	MISSION AND DESCRIPTION	WEIGHTS																								
<p>No. &amp; Model (1) J52-P-6A Axial Flow Twin Spool Turbojet Without Afterburner</p> <p>Mfr. - P &amp; W Aircraft</p> <p>Spec. No. - P &amp; W Specification N1731-B Length ..... 116 in. Diameter ..... 31 in.</p> <p style="text-align: center;"><b>RATINGS</b></p> <p>Mil. 11,650 RPM 8500 lb Norm. 11,400 RPM 7500 lb</p>	<p>The A-4E is a lightweight, high performance, carrier-based, jet powered attack airplane capable of dive, glide and loft bombing, in-flight fueling (tanker or receiver), carrying an air-to-surface missile, and firing conventional guns and rockets. It can operate from CVS and CVA type carriers. Limited all-weather navigational aids are provided. The A-4E is an A-4C with a J52 engine and two additional wing weapon stations.</p> <p>The arrangement is conventional with all-metal semi-monocoque structure and three-spar low-aspect-ratio wing. Landing gear, flaps and speed brakes are hydraulically operated. An electrically operated, fully adjustable stabilizer is used to trim throughout the normal flight range. The aileron, elevator, and rudder systems are hydraulic-power operated. Manual control is provided for emergencies. An automatic flight control system is provided for pilot relief.</p> <p>The small size of the airplane precludes the need for folding wings. The aft fuselage is readily removable to permit quick engine change.</p>	<p style="text-align: center;"><b>LOADINGS</b></p> <table border="1"> <thead> <tr> <th></th> <th>LB</th> <th>L.F.</th> </tr> </thead> <tbody> <tr> <td>Empty (E)</td> <td>9,624</td> <td>--</td> </tr> <tr> <td>Basic</td> <td>10,391</td> <td>--</td> </tr> <tr> <td>Flight Design</td> <td>12,504</td> <td>7.0</td> </tr> <tr> <td>Combat</td> <td>16,135</td> <td>5.4</td> </tr> <tr> <td>Max. T.O.</td> <td>24,500</td> <td>3.6</td> </tr> <tr> <td>Max. Landing (Arrest)</td> <td>14,500</td> <td>6.0</td> </tr> <tr> <td>(Airfield)</td> <td>16,000</td> <td>5.5</td> </tr> </tbody> </table>		LB	L.F.	Empty (E)	9,624	--	Basic	10,391	--	Flight Design	12,504	7.0	Combat	16,135	5.4	Max. T.O.	24,500	3.6	Max. Landing (Arrest)	14,500	6.0	(Airfield)	16,000	5.5
	LB	L.F.																								
Empty (E)	9,624	--																								
Basic	10,391	--																								
Flight Design	12,504	7.0																								
Combat	16,135	5.4																								
Max. T.O.	24,500	3.6																								
Max. Landing (Arrest)	14,500	6.0																								
(Airfield)	16,000	5.5																								
<p style="text-align: center;"><b>ELECTRONICS</b></p> <p>Electronics Central AN/ASQ-17B Consisting of:</p> <p>UHF Communications AN/ARC-27 IFF-AN/APX-6 SIF-AN/APN-89 AN/ARA-25</p> <p>Elect. Altimeter .....AN/APN-141(V) Navigation Set ..... AN/APN-153(V) TACAN ..... AN/ARN-52(V) NAV. Computer ..... AN/ASN-41 UHF Direction Finder ..... AN/ARA-25 Radar ..... AN/APG-53A G/M Guidance ..... AN/ARW-73 LABS ..... AN/AJB-3A Auto. Pilot ..... AN/ASN-54(V)</p>	<p style="text-align: center;"><b>DEVELOPMENT</b></p> <p>Navy authority to proceed ..... 1 June 1960 First Flight .....12 July 1961 Fleet Delivery ..... December 1962</p> <p style="text-align: center;"><b>DIMENSIONS</b></p> <p>Span ..... 27.5 ft. Length ..... 41.3 ft* Height ..... 15.0 ft. Max. Tread ..... 7.8 ft. Turn. Rad. .... 20.5 ft* Wing Area .....260 sq. ft.</p> <p>*Without Refueling Probe</p>	<p style="text-align: center;"><b>FUEL AND OIL</b></p> <table border="1"> <thead> <tr> <th>Gal.</th> <th>No. Tanks</th> <th>Location</th> </tr> </thead> <tbody> <tr> <td>560</td> <td>1</td> <td>Wing</td> </tr> <tr> <td>240</td> <td>1</td> <td>Fuselage</td> </tr> </tbody> </table> <p>In-flight fueling provided</p> <p>Fuel Spec ..... MIL-F-5624</p> <p style="text-align: center;"><b>OIL</b></p> <p>5.0 Gal. mounted on engine Oil Spec. .... MIL-L-7808</p>	Gal.	No. Tanks	Location	560	1	Wing	240	1	Fuselage															
Gal.	No. Tanks	Location																								
560	1	Wing																								
240	1	Fuselage																								
		<p style="text-align: center;"><b>ORDNANCE</b></p> <table border="1"> <thead> <tr> <th>No.</th> <th>Location</th> <th>Loading</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Fuselage</td> <td>Stores up to 3575 lb</td> </tr> <tr> <td>2</td> <td>Inbd. Wing</td> <td>Stores up to 1200 lb</td> </tr> <tr> <td>2</td> <td>Outbd. Wing</td> <td>Stores up to 500 lb</td> </tr> </tbody> </table> <hr/> <p style="text-align: center;"><b>GUNS</b></p> <table border="1"> <tbody> <tr> <td>2</td> <td>Lower Wing Outbd of Fuselage</td> <td>MK-12 20mm Guns with 100 rds. per Gun</td> </tr> </tbody> </table>	No.	Location	Loading	1	Fuselage	Stores up to 3575 lb	2	Inbd. Wing	Stores up to 1200 lb	2	Outbd. Wing	Stores up to 500 lb	2	Lower Wing Outbd of Fuselage	MK-12 20mm Guns with 100 rds. per Gun									
No.	Location	Loading																								
1	Fuselage	Stores up to 3575 lb																								
2	Inbd. Wing	Stores up to 1200 lb																								
2	Outbd. Wing	Stores up to 500 lb																								
2	Lower Wing Outbd of Fuselage	MK-12 20mm Guns with 100 rds. per Gun																								

DECLASSIFIED  
CONFIDENTIAL

NAVAIR OO-110AA4-4  
SERVICE

**PERFORMANCE SUMMARY**

TAKE-OFF LOADING CONDITION	(1) Hi-Hi-Hi Clean Airplane	(3) S.L. Store Delivery 1-MK 28	(5) Close Support 1-300 Gal. Tank 12-MK 81 Snakeeyes	(7) Close Support 3-AGM-128(BULLPUP) 2-300 Gal. Tanks	(9) Ferry 3-300 Gal. Tanks
<b>TAKE-OFF WEIGHT</b>	lb.	15,968	18,311	22,392	22,797
Fuel internal/external (JP-5)	lb./lb.	5440/None	5440/None	5440/2040	5440/4080
Payload	lb.	None	2040	3600	1710
Wing loading	lb./sq. ft.	61.4	70.4	86.1	87.6
Stall speed—power-off	kn.	113	121	138	138
Take-off run at S.L.— calm	(A) ft.	1950	2660	4700	4960
Take-off run at S.L.— 25 kn. wind	(A) ft.	1270	1880	3360	3580
Take-off to clear 50 ft.— calm	(A) ft.	3200	4160	6860	7200
Max. speed/altitude	(A) kn./ft.	584/SL	552/SL	480/10,000	503/5,000
Rate of climb at S.L.	(A) fpm.	8750	7100	4600	4650
Time: S.L. to 20,000 ft.	(A) min.	2.9	4.0	6.8	6.4
Time: S.L. to 30,000 ft.	(A) min.	4.9	6.9	--	--
Service ceiling (100 fpm)	(A) ft.	42,700	38,800	30,100	30,400
Combat range (Tanks Retained)	n.mi.	1130	839	824	1250
Average cruising speed	kn.	435	420	391	404
Cruising altitude(s)	ft.	36,600-42,200	33,800 - 38,200	27,500 - 33,300	27,600 - 40,300
Combat radius/mission time	n.mi./hr.	530/2.5	200/1.0(c)	260/2.3	475/3.3
Average cruising speed	kn.	435	433	409	413
COMBAT LOADING CONDITION	(2) Clean Airplane	(4) Store Retained	(6) Tank Dropped Stores Retained	(8) Tanks Dropped Missiles Retained	(10) Tanks Retained
<b>COMBAT WEIGHT</b>	lb.	13,792	16,135	20,154	18,321
Engine power	MILITARY	MILITARY	MILITARY	MILITARY	MILITARY
Fuel	lb.	3264	3264	5440	5440
Combat speed/combat altitude	kn./ft.	516/38,300	553/SL	491/5000	524/5000
Rate of climb/combat altitude	fpm/ft.	2550/38,300	8250/SL	4550/5000	5650/5000
Combat ceiling (500 fpm)	ft.	44,600	40,150	31,600	35,100
Rate of climb at S.L.	fpm.	10,250	8250	5400	6550
Max. speed at S.L.	kn.	585	553	488	522
Max. speed/altitude	kn./ft.	585/SL	553/SL	494/12,000	524/6000
<b>LANDING WEIGHT</b>	lb.	11,352	11,677	12,083	12,245
Fuel	lb.	824	846	969	1075
Stall speed—power-off/approach power	kn./kn.	96/91	97/92	99/94	99/95
Landing distance—ground roll/over 50 ft. obst.	ft./ft.	3360/4075	3430/4145	3540/4255	3570/4285
<b>NOTES</b>					
(A) Military Thrust, Take-Off Weight, Stores and Tanks Retained					
(B) Ferry Range is 2040 N.Mi. if Tanks are Dropped when Empty					
(C) With 2-300 Gal. Tanks the Combat Radius is 580 N.Mi					
(D) All Loadings Except Clean Airplane Have Pylons on all Stations					
(E) Data Basis: NATC and DAC Flight Test of Model A-4E with the J52-P-6A Engine					

4

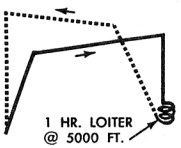
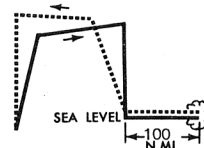
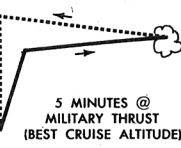
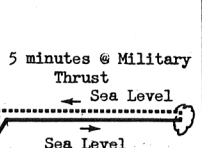

CONFIDENTIAL  
DECLASSIFIED

DECLASSIFIED

NAVAIR 00-110AA4-4

SERVICE

**MISSION SUMMARY — ALTERNATE LOADINGS**

		CLOSE SUPPORT		HI-LO-LO-HI		HI-HI-HI		LO-LO-LO		HI-LO-HI	
											
EXTERNAL STORE LOADING (A)	T.O.B.W.	COMBAT RADIUS n. ml.	MISSION TIME hr.	COMBAT RADIUS n. ml.	MISSION TIME hr.	COMBAT RADIUS n. ml.	MISSION TIME hr.	COMBAT RADIUS n. ml.	MISSION TIME hr.	COMBAT RADIUS n. ml.	MISSION TIME hr.
⑪ (1) MK 28	18,311	190	1.9	200	1.3	450	2.2	190	1.5	345	1.7
⑫ (1) MK 28 (2) 300 Gal. Drop Tanks	22,787	560	3.7	605	3.2	790	3.9	395	2.8	715	3.5
⑬ (6) MK 81 Snakeyes	18,195	160	1.8	195	1.3	405	2.0	180	1.4	315	1.6
⑭ (6) MK 81 Snakeys (2) 300 Gal. Drop Tanks	22,671	490	3.4	545	3.0	730	3.6	365	2.7	650	3.2
⑮ (6) MK 82 Snakeyes	19,785	120	1.6	175	1.2	365	1.9	175	1.4	290	1.5
⑯ (6) MK 82 Snakeyes (2) 300 Gal. Drop Tanks	24,261	430	3.1	500	2.8	675	3.5	350	2.6	600	3.0
⑰ (12) MK 81 Snakeyes (6) MK 82 Snakeyes	23,703	--	--	150	1.1	265	1.5	150	1.2	215	1.2
○											
○											

(A) All Loadings include Pylons on all wing stations, 200 Rounds of 20mm Ammunition and full internal fuel (5440 lbs) **NOTES**  
 (B) Data Basis: NATO and DAC Flight Tests of Model A-4E with the J52.P.6A Engine

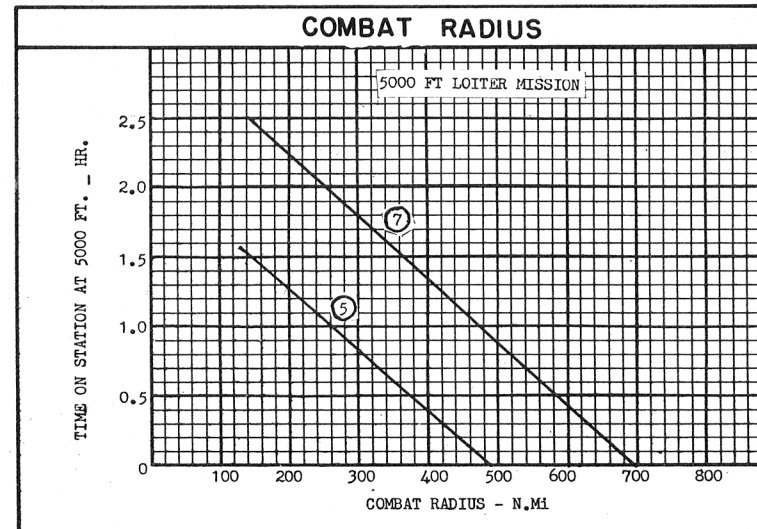
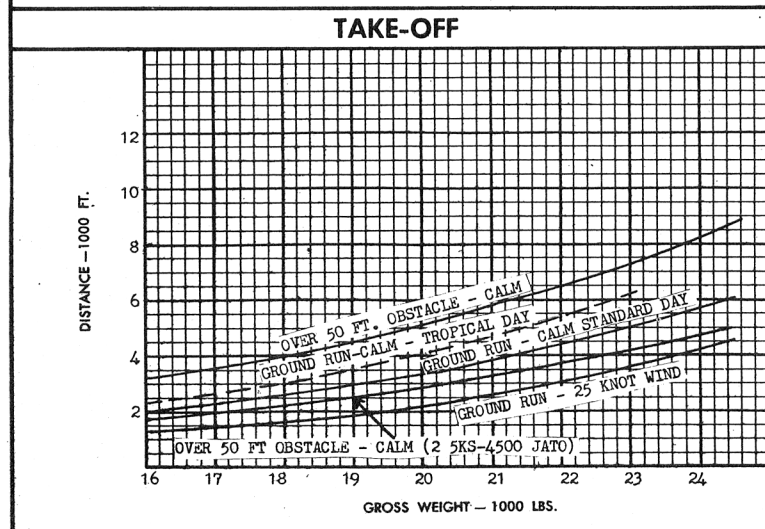
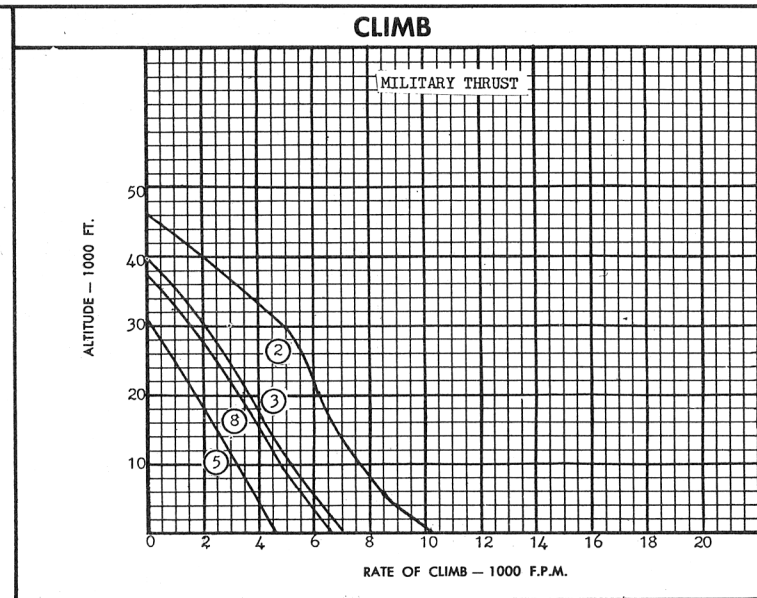
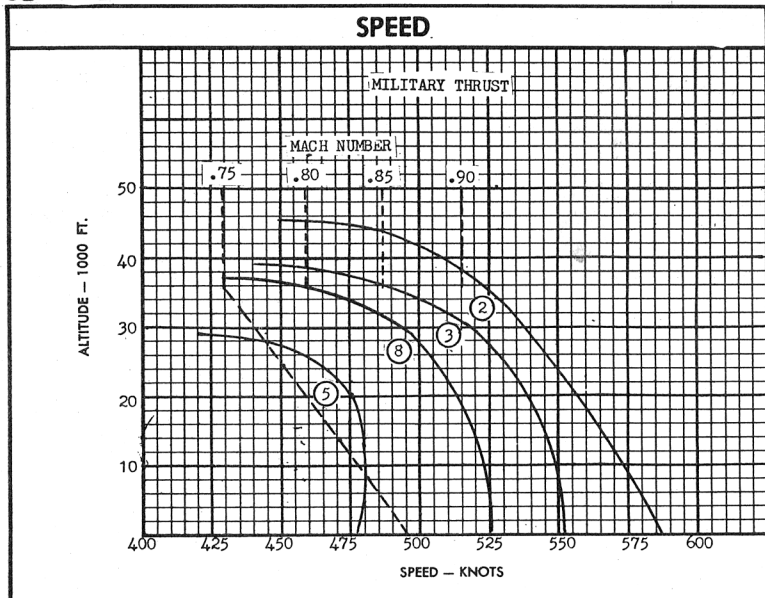
5

CONFIDENTIAL  
DECLASSIFIED

DECLASSIFIED  
CONFIDENTIAL

NAVAIR 00-110AA4-4

SERVICE



○ LOADING CONDITION COLUMN NUMBER

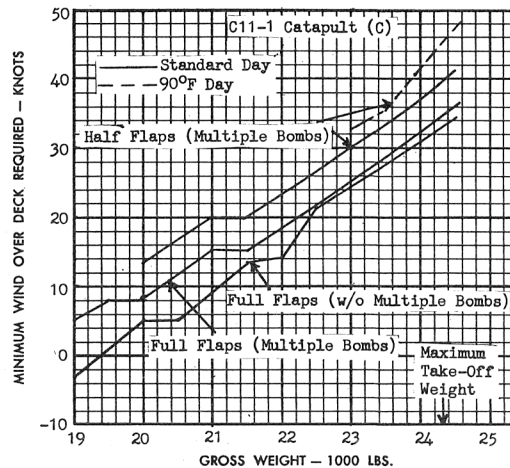
8

CONFIDENTIAL  
DECLASSIFIED

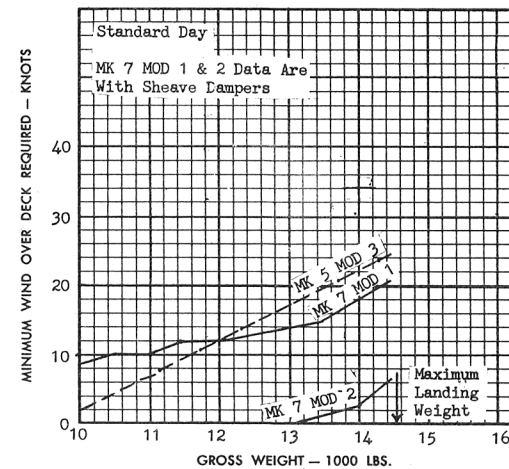


DECLASSIFIED

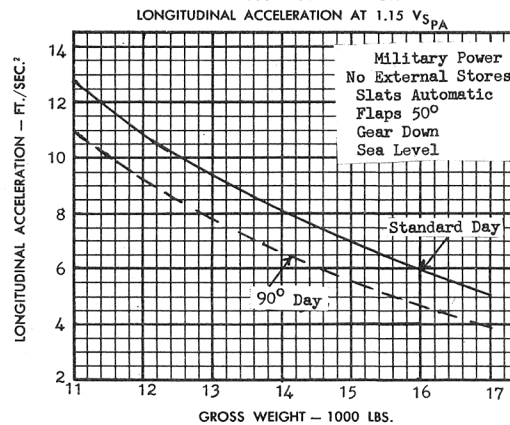
**MINIMUM WIND OVER DECK REQUIRED FOR CATAPULTING  
VS. GROSS WEIGHT (A), (B)**



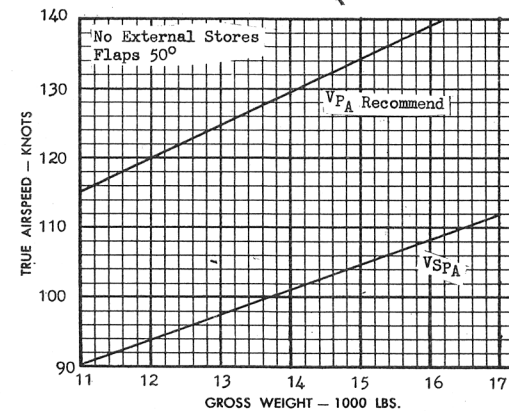
**MINIMUM WIND OVER DECK REQUIRED FOR ARRESTING  
VS. GROSS WEIGHT (D)**



**WAVE-OFF ACCELERATION**



**MINIMUM CARRIER APPROACH SPEEDS (E)**



- (A) Catapult Wind Over Deck Requirements are Based on Results of Aircraft/Catapult Flight Testing (Launch Bul. 6-36C, Figs 6 & 9)  
 (B) Catapult End Speed is Limited by a Maximum Tow Force of 120,000 lb Above a Take-Off Weight of 22,500 lb on the C11-1 and C7 Catapults and a Maximum Longitudinal Acceleration of 5.47g Below 22,500 lb.  
 (C) Minimum Wind Over Deck Required for C7 Catapult is C11-1 Requirement Minus 12 Knots

**NOTES**

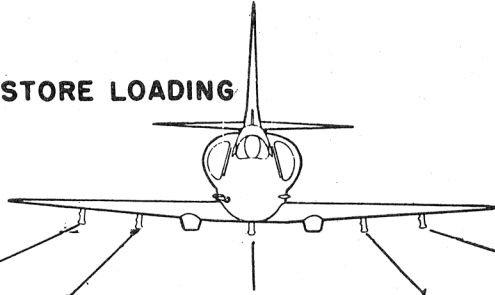
- (D) Arrested Landing Wind Over the Deck Requirements are Based on Results of Aircraft/Arresting Gear Flight Testing (Recovery Bul.:21-12B,24-13A and 26-12B)  
 (E) Approach Speed Based on Speeds Recommended in Flight Handbook  
 (F) SPOTTING: A Total of 175 Airplanes can be Accommodated in a Landing spot on the Flight and Hanger Decks of a CVA-59 Class Carrier.

CONFIDENTIAL  
DECLASSIFIED

DECLASSIFIED  
CONFIDENTIAL

NAVAIR 00-110AA4-4 SERVICE

STORE LOADING



ORDNANCE	(Station No. 5) LEFT OUTBOARD	(Station No. 4) LEFT INBOARD	(Station No. 3) FUSELAGE	(Station No. 2) RIGHT INBOARD	(Station No. 1) RIGHT OUTBOARD
MINES	<ul style="list-style-type: none"> <li>--</li> <li>--</li> <li>1) MK-50</li> <li>--</li> <li>--</li> <li>--</li> </ul>	<ul style="list-style-type: none"> <li>--</li> <li>1) MK-36</li> <li>1) MK-50</li> <li>1) MK-52</li> <li>--</li> <li>--</li> </ul>	<ul style="list-style-type: none"> <li>1) MK-25</li> <li>1) MK-36</li> <li>1) MK-50</li> <li>1) MK-52</li> <li>1) MK-55</li> <li>1) MK-56</li> </ul>	<ul style="list-style-type: none"> <li>--</li> <li>1) MK-36</li> <li>1) MK-50</li> <li>1) MK-52</li> <li>--</li> <li>--</li> </ul>	<ul style="list-style-type: none"> <li>--</li> <li>1) MK-50</li> <li>--</li> <li>--</li> </ul>
BOMBS	<ul style="list-style-type: none"> <li>1) MK-77 Fire Bomb</li> <li>--</li> <li>1) MK-81</li> <li>1) MK-81 Snakeye</li> <li>1) MK-82</li> <li>1) MK-82 Snakeye</li> <li>--</li> <li>1) AN-M30A1(100 Lb.G.P.)</li> <li>1) AN-M57A(250LBG.P.)</li> <li>1) AN-M64A1(500LBG.P.)</li> <li>--</li> <li>1) AN-M81(260LB FRAG.)</li> <li>--</li> <li>1) AN-M88(220LB FRAG.)</li> </ul>	<ul style="list-style-type: none"> <li>3) MK-77 Fire Bombs</li> <li>1) MK-79 Fire Bomb</li> <li>6) MK-81</li> <li>6) MK-81 Snakeyes</li> <li>3) MK-82</li> <li>3) MK-82 Snakeyes</li> <li>1) MK-83</li> <li>--</li> <li>1) AN-M30A1(100LBGP.)</li> <li>5) AN-M57A(250LBG.P.)</li> <li>1) AN-M64A1(500LBGP.)</li> <li>1) AN-M65A1(1000LBGP.)</li> <li>--</li> <li>5) AN-M81(260LB FRAG.)</li> <li>1) M117 Demolition</li> <li>5) AN-M88(220LB FRAG.)</li> </ul>	<ul style="list-style-type: none"> <li>4) MK-77 Fire Bombs</li> <li>1) MK-79 Fire Bomb</li> <li>6) MK-81</li> <li>6) MK-81 Snakeyes</li> <li>6) MK-82</li> <li>6) MK-82 Snakeyes</li> <li>3) MK-83</li> <li>1) MK-84</li> <li>1) AN-M30A1(100LBGP.)</li> <li>6) AN-M57A(250LBG.P.)</li> <li>1) AN-M64A1(500LBGP.)</li> <li>1) AN-M65A1(1000LBGP.)</li> <li>1) AN-M66A2(2000LBG.P.)</li> <li>6) AN-M81(260LB FRAG.)</li> <li>1) M117 Demolition</li> <li>6) AN-M88(220LB FRAG.)</li> </ul>	<ul style="list-style-type: none"> <li>3) MK-77 Fire Bombs</li> <li>1) MK-79 Fire Bomb</li> <li>6) MK-81</li> <li>6) MK-81 Snakeyes</li> <li>3) MK-82</li> <li>3) MK-82 Snakeyes</li> <li>1) MK-83</li> <li>--</li> <li>1) AN-M30A1(100LBGP.)</li> <li>5) AN-M57A(250LBG.P.)</li> <li>1) AN-M64A1(500LBGP.)</li> <li>1) AN-M65A1(1000LBGP.)</li> <li>5) AN-M81(260LB FRAG.)</li> <li>1) M117 Demolition</li> <li>5) AN-M88(220LB FRAG.)</li> </ul>	<ul style="list-style-type: none"> <li>1) MK-77 Fire Bomb</li> <li>--</li> <li>1) MK-81</li> <li>1) MK-81 Snakeye</li> <li>1) MK-82</li> <li>1) MK-82 Snakeye</li> <li>--</li> <li>1) AN-M30A1(100LBG.P.)</li> <li>1) AN-M57A(250LBG.P.)</li> <li>1) AN-M64A1(500LBGP.)</li> <li>--</li> <li>1) AN-M81(260LB FRAG.)</li> <li>--</li> <li>1) AN-M88(220LB FRAG.)</li> </ul>
SPECIAL WEAPONS	<ul style="list-style-type: none"> <li>--</li> <li>--</li> </ul>	<ul style="list-style-type: none"> <li>--</li> <li>--</li> </ul>	<ul style="list-style-type: none"> <li>1) MK-28</li> <li>1) MK-43</li> <li>1) MK-57</li> </ul>	<ul style="list-style-type: none"> <li>--</li> <li>--</li> <li>--</li> </ul>	<ul style="list-style-type: none"> <li>--</li> <li>--</li> <li>--</li> </ul>
ROCKET LAUNCHERS(A)	<ul style="list-style-type: none"> <li>1) LAU-3A/A</li> <li>1) LAU-10A</li> <li>1) LAU-32A/A</li> </ul>	<ul style="list-style-type: none"> <li>2) LAU-3A/A</li> <li>2) LAU-10A</li> <li>2) LAU-32A/A</li> </ul>	<ul style="list-style-type: none"> <li>3) LAU-3A/A</li> <li>3) LAU-10A</li> <li>3) LAU-32A/A</li> </ul>	<ul style="list-style-type: none"> <li>2) LAU-3A/A</li> <li>2) LAU-10A</li> <li>2) LAU-32A/A</li> </ul>	<ul style="list-style-type: none"> <li>1) LAU-3A/A</li> <li>1) LAU-10A</li> <li>1) LAU-32A/A</li> </ul>
GUIDED MISSILES	<ul style="list-style-type: none"> <li>1) AGM-12A, -12B (BULLPUP A)</li> <li>--</li> <li>1) AGM-45A(SHRIKE)</li> <li>--</li> </ul>	<ul style="list-style-type: none"> <li>1) AGM-12A, -12B (BULLPUP A)</li> <li>1) AGM-12C(BULLPUP B)</li> <li>1) AGM-45A (SHRIKE)</li> <li>1) SIDEWINDER 1A</li> </ul>	<ul style="list-style-type: none"> <li>1) AGM-12A, -12B (BULLPUP A)</li> <li>--</li> <li>--</li> <li>--</li> </ul>	<ul style="list-style-type: none"> <li>1) AGM-12A, -12B (BULLPUP A)</li> <li>1) AGM-12C(BULLPUP B)</li> <li>1) AGM-45A (SHRIKE)</li> <li>1) SIDEWINDER 1A</li> </ul>	<ul style="list-style-type: none"> <li>1) AGM-12A, -12B (BULLPUP A)</li> <li>--</li> <li>1) AGM-45A (SHRIKE)</li> <li>--</li> </ul>

CONFIDENTIAL  
DECLASSIFIED

DECLASSIFIED

SERVICE

NAVAIR 00-110AA4-4

STORE LOADING

ORDNANCE		(Station No. 5) LEFT OUTBOARD	(Station No. 4) LEFT INBOARD	(Station No. 3) FUSELAGE	(Station No. 2) RIGHT INBOARD	(Station No. 1) RIGHT OUTBOARD	
FUEL TANKS		-- -- -- --	1) 150 Gal.Ext.Tank 1) 300 Gal.Ext.Tank -- --	1) 150 Gal.Ext.Tank 1) 300 Gal.Ext.Tank 1) 300GalRefuelTank 1) 400 Gal.Ext.Tank	1) 150 Gal.Ext.Tank 1) 300 Gal.Ext.Tank -- --	-- -- -- --	
MISCELLANEOUS STORES (A)		1) MK-94 Chemical Bomb -- -- 1) Aero 7A(Lazy Dog) -- -- -- -- 1) LM-119AFilm Delivery Container 1) LAU-10/A Leaflet Dispenser -- 1) GTC-85 Starter Pod 6) MK-5 MODS 7, 10 Parachute Flares 6) MK-6 MODS 5, 6 Parachute Flares 6) MK-24 MODS 2A, 3 Parachute Flares 6) MK-6 MOD 3 Float Light	1) MK-94 Chemical Bomb 1) CBU-1A/A 2) CBU-2A/A 1) Aero 7A (Lazy Dog) 1) MK-44 Cluster Adapter (Lazy Dog) 1) MK-4 Gun Pod 1) MK-12 MOD 0 Chemical Tank -- 1) ALQ-31A ECM POD 1) MK-900 Chaff Dispenser 1) LM-119A Film Delivery Container 1) LAU-10/A Leaflet Dispenser -- 1) GTC-85 Starter Pod 6) MK-5, MOD 7, 10 Parachute Flares 6) MK-6 MODS 5, 6 Parachute Flares 6) MK-24 MODS 2A, 3 Parachute Flares 6) MK-6 MOD 3 Float Light	6) MK-94 Chemical Bomb -- -- -- 1) MK-44 Cluster Adapter (Lazy Dog) 1) MK-4 Gun Pod -- 1) Aero 14B Spray Tank 1) ALQ-31A ECM POD 1) MK-900 Chaff Dispenser -- 1) LAU-10/A Leaflet Dispenser 1) NAVPAC 1) GTC-85 Starter Pod 6) MK-5 MODS 7, 10 Parachute Flares 6) MK-6 MODS 5, 6 Parachute Flares 6) MK-24 MODS 2A, 3 Parachute Flares 6) MK-6 MOD 3 Float Light	1) MK-94 Chemical Bomb 1) CBU-1A/A 2) CBU-2A/A 1) Aero 7A(Lazy Dog) 1) MK-44 Cluster Adapter (Lazy Dog) 1) MK-4 Gun Pod 1) MK-12 MOD Chemical Tank -- 1) ALQ-31 ECM POD 1) MK-900 Chaff Dispenser 1) LM-119A Film Delivery Container 1) LAU-10/A Leaflet Dispenser -- 1) GTC-85 Starter Pod 6) MK-5 MODS 7, 10 Parachute Flares 6) MK-6 MODS 5, 6 Parachute Flares 6) MK-24 MODS 2A, 3 Parachute Flares 6) MK-6 MOD 3 Float Light	1) MK-94 Chemical Bomb -- -- 1) Aero 7A(Lazy Dog) -- -- -- -- 1) LM-119A Film Delivery Container 1) LAU-10/A Leaflet Dispenser -- 1) GTC-85 Starter Pod 6) MK-5 MODS 7, 10 Parachute Flares 6) MK-6 MODS 5, 6 Parachute Flares 6) MK-24 MODS 2A, 3 Parachute Flares 6) MK-6 MOD 3 Float Light	
TRAINING STORES (A)		6) MK-76 MOD 4, 5 1) MK-86 1) MK-87 -- 6) MK-89	6) MK-76 MOD 4, 5 6) MK-86 6) MK-87 1) MK-88 6) MK-89	6) MK-76 MOD 4, 5 6) MK-86 6) MK-87 1) MK-88 6) MK-89	6) MK-76 MOD 4, 5 6) MK-86 6) MK-87 1) MK-88 6) MK-89	6) MK-76 MOD 4, 5 1) MK-86 1) MK-87 -- 6) MK-89	

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

CONFIDENTIAL  
DECLASSIFIED

DECLASSIFIED

CONFIDENTIAL

NAVAIR 00-110AAA-4  
SERVICE

STORE LOADING

ORDNANCE	(Station No. 5) LEFT OUTBOARD	(Station No. 4) LEFT INBOARD	(Station No. 3) FUSELAGE	(Station No. 2) RIGHT INBOARD	(Station No. 1) RIGHT OUTBOARD
TRAINING STORES (A) (continued)	6) MK-106 MOD 3 -- 1) Aero 6A-1, 6A-2 -- -- --	6) MK-106 MOD 3 -- 1) Aero 6A-1, 6A-2 1) FAGU Pipe Organ -- 1) MK-26 MOD 0 Side-winder Target Rtk --	6) MK-106 MOD 3 1) Aero 8A Fract Bomb Contain. (MK-76, MK-89, MK-106) 1) Aero 6A-1, 6A-2 1) FAGU Pipe Organ 1) AQM-37A Target -- 1) Banner Tow Target	6) MK-106 MOD 3 -- 1) Aero 6A-1, 6A-2 1) FAGU Pipe Organ -- 1) MK-26 MOD 0 Side-winder Target Rkt. --	6) MK-106 MOD 3 -- 1) Aero 6A-1, 6A-2 -- -- --
MOUNTING/LAUNCHING DEVICES	-- -- -- --	1) Douglas A/A37B-1 MBR 1) Douglas MER 1) Douglas TER 1) A/A37B-3 PMBR	1) Douglas A/A37B-1 MBR 1) Douglas MER 1) Douglas TER 1) A/A37B-3 PMBR	1) Douglas A/A37B-1 MBR 1) Douglas MER 1) Douglas TER 1) A/A37B-3 PMBR	-- -- -- --
NOTES: (A) Multiple Stores are Mounted on the Douglas MBR, MER, TER. Stores may be Mounted Singly on the Aero 7A Centerline Rack-Pylon and the Aero 20A Wing Rack-Pylon.			(B) All Wing Stores or Wing Mounting/Launching Devices are Mounted on the Aero 7A Centerline Rack-Pylon or the Aero 20A wing Rack-Pylon (C) Only Individual Station Maximum Capabilities are Listed		

CONFIDENTIAL

DECLASSIFIED

NOTES

HI-HI-HI

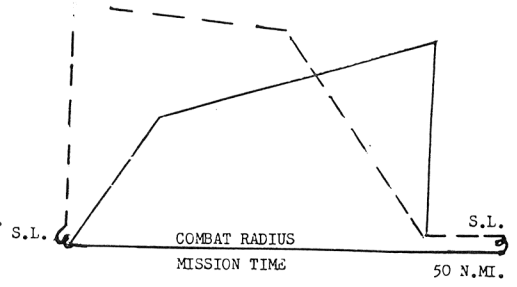
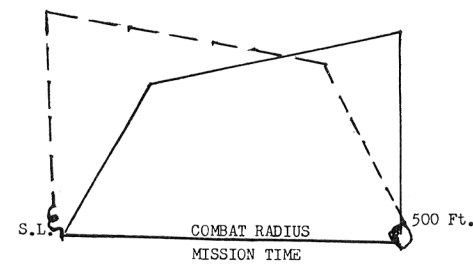
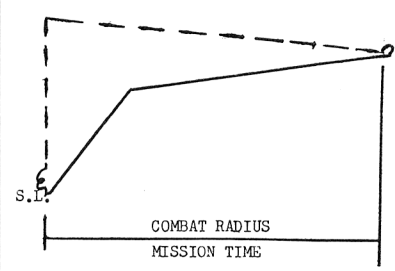
Warm-Up, Taxi, Take-Off: 5 min S.L. NRP  
 Climb: On course to Opt Cruise Alt with Military Power  
 Cruise Out: At Maximum Range Speed at Optimum Cruise Altitude (Drop Fuel Tanks when Empty)  
 Combat: 5 Min. at MRT (Stores On, No Distance Gained) (Drop Stores)  
 Cruise Back: At Maximum Range Speed at Optimum Altitude.  
 Reserve: 5% initial fuel + 20 min at Maximum Endurance Speed at S. L.

CLOSE SUPPORT

Warm-Up, Taxi, Take-Off: 5 min S.L. NRP  
 Climb: On course to Optimum Cruise altitude with Military Power  
 Cruise Out: At Maximum Range Speed at Optimum Cruise Altitude (Drop fuel Tanks when empty)  
 Descend: To 5000 ft (No Fuel Used, No Distance Gained)  
 Loiter: 1 Hour at Maximum Endurance Speed (NO Distance Gained) Stores Dropped at End of Loiter  
 Climb: On Course to Optimum Cruise Altitude with Military Power  
 Cruise Back: At Maximum Range Speed at Optimum Altitude  
 Reserve: 5% initial Fuel + 20 Min. at Maximum Endurance Speed at S.L.

SEA LEVEL STORE DELIVERY

Warm-Up, Taxi, Take-Off: 5 min S.L. NRP  
 Climb: On course to Optimum Cruise Altitude with Military Power  
 Cruise Out: At Maximum Range Speed at Optimum Cruise Altitude (Drop Fuel Tanks when Empty)  
 Descend: To S.L. When 50 N. Mi. From Target (No Fuel Used, No Distance Gained)  
 Run In: 50 N. Mi at Vmax at MRT  
 Combat: 5 Min. at MRT (Stores On, No Distance Gained) Stores Dropped After Combat  
 Run Out: 50 N. MI. at Vmax at MRT at S.L.  
 Climb: On Course to Optimum Cruise Altitude with Military Power  
 Cruise Back: At Maximum Range Speed at Optimum Altitude  
 Reserve: 5% Initial Fuel + 20 min at Maximum Endurance Speed at S.L.



NOTE -  
 Mission Time: Excludes Time for Warm-Up and Take-Off and 20 Minutes Loiter Time  
 Cycle Time: Is Mission Time Plus 20 Minutes S. L. Loiter

○ LOADING CONDITION COLUMN NUMBER

SERVICE

NOTES

HI-LO-LO-HI

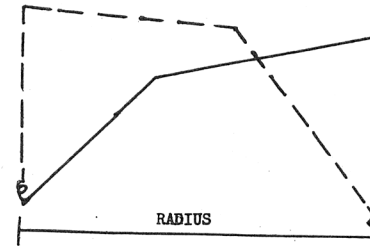
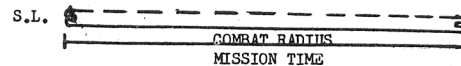
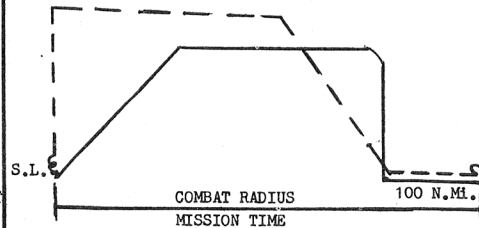
Warm-Up, Taxi, Take-Off: 5 min S.L. NRP  
 Climb: On Course to Optimum Cruise Altitude with Military Power  
 Cruise Out: At Maximum Range Speed at Optimum Cruise Altitude (Drop Fuel Tanks when Empty)  
 Descend: To S.L. When 100 N.Mi From Target (No Fuel Used, No Distance Gained)  
 Cruise: At Maximum Range Speed at S.L. (Drop Fuel Tanks When Empty)  
 Combat: 5 Min. at MRT (Stores On, No Distance Gained)  
 Drop Stores  
 Cruise: At Maximum Range Speed at S.L. to a Point 100 N.Mi from Target  
 Climb: On Course to Optimum Cruise Altitude with Military Power  
 Cruise Back: At Maximum Range Speed at Optimum Altitude  
 Reserve: 5% Initial Fuel + 20 min at Maximum Endurance Speed at S.L.

LO-LO-LO

Warm-Up, Taxi, Take-Off: 5 min S.L. NRP  
 Cruise: At Maximum Range Speed at S.L. (Drop Fuel Tanks When Empty)  
 Combat: 5 Min. at MRT (Stores on, No Distance Gained)  
 Drop Stores  
 Cruise: At Maximum Range Speed at Sea Level  
 Reserve: 5% Initial Fuel + 20 Min at Maximum Endurance Speed at S.L.

HI-LO-HI

Warm-Up, Taxi, and Take-Off: 5 minutes at Normal Rated Thrust at Sea Level  
 Climb: On Course to Optimum Cruise Altitude with Military Rated Thrust  
 Cruise Out: At Altitudes and Speeds for Maximum Range (Drop Fuel Tanks When Empty)  
 Descend: To S.L. (No Fuel Used, No Distance Gained)  
 Combat: 5 min with Military Rated Thrust at S.L. (No Distance Gained)  
 Drop Stores  
 Climb: On course to optimum cruise altitude with Military Rated Thrust  
 Cruise Back: At Altitudes and Speeds for Maximum Range  
 Reserve: 5% Initial Fuel + 20 minutes at Maximum Endurance at S.L.



NOTE  
 Mission Time: Excludes Time for Warmup and Take-Off and 20 Minute Loiter Time  
 Cycle Time: Mission Time Plus 20 Minutes S.L. Loiter

○ LOADING CONDITION COLUMN NUMBER

12