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BY T.G. Hill ON 12/19/96

NAVAIR 00-110AA4-9

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GROUP 4 DOCUMENT
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DOD DIR 5200.10

Standard Aircraft Characteristics

NAVY MODEL A-4M AIRCRAFT

(TITLE UNCLASSIFIED)

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

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JUNE 1971

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SERVICE



STANDARD AIRCRAFT CHARACTERISTICS

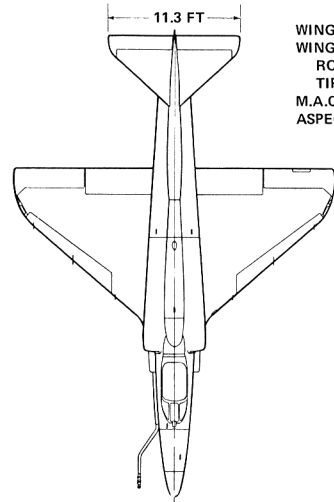
A-4M SKYHAWK

MCDONNELL DOUGLAS

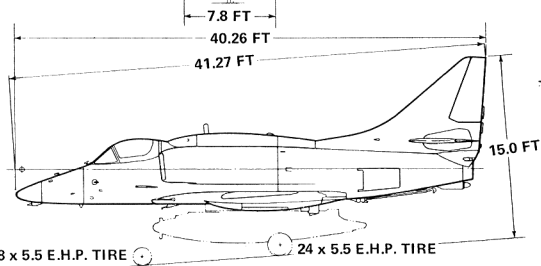
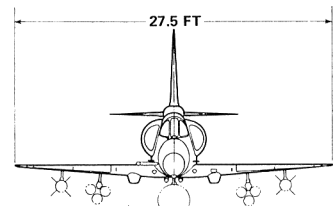
A-4M (J52-P-408)

DECLASSIFIED

NAVAL AIR SYSTEMS COMMAND
NAVY DEPARTMENT



WING AREA: 260 SQ FT
WING SECTION:
ROOT NACA 0008-1.1-25-.0875 (.5 x 230)
TIP NACA 0005-0.825-50-.0787 (.5 x 230)
M.A.C. 129.64 IN.
ASPECT RATIO 2.91

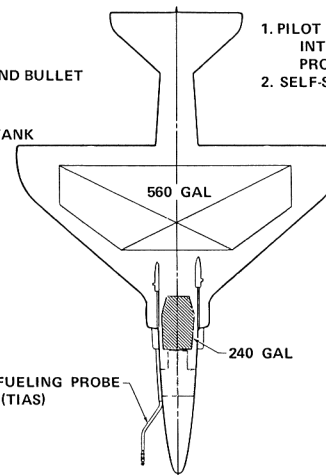


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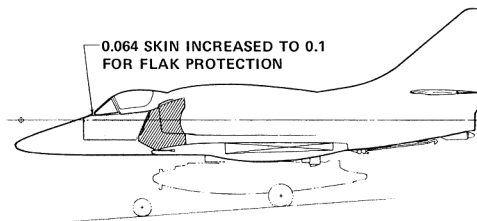
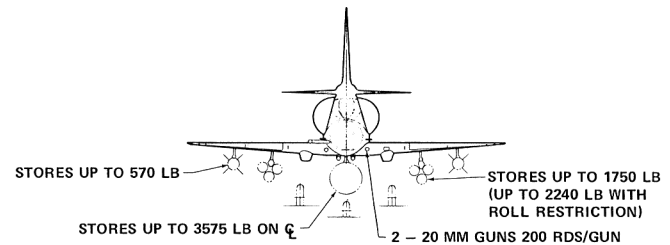
DESCRIPTIVE ARRANGEMENT

NAVAL AIR SYSTEMS COMMAND
NAVY DEPARTMENT

- FLAK PROTECTION AND BULLET RESISTANT GLASS
- SELF-SEALING TANK
- NON-SELF-SEALING TANK



- PROTECTION
- 1. PILOT INTEGRAL 29 LB
 - PROVISIONS 125 LB
 - 2. SELF-SEALING CELL 107 LB



ARMAMENT AND TANKAGE

POWER PLANT	MISSION AND DESCRIPTION	WEIGHTS																																																																													
<p>No. and Model (1) J52-P-408 Axial-Flow Twin-Spool Turbojet without Afterburner</p> <p>MFR. — P&W Aircraft Spec. No. N-6128</p> <p>Length 118.4 in. Diameter 30.2 in.</p> <p style="text-align: center;">RATINGS</p> <table style="width: 100%; border: none;"> <tr> <td style="width: 30%;">Intermediate</td> <td style="width: 30%;">12,010 RPM</td> <td style="width: 40%;">11,187 lb</td> </tr> <tr> <td>Maximum Continuous</td> <td>11,670 RPM</td> <td>9,900 lb</td> </tr> </table>	Intermediate	12,010 RPM	11,187 lb	Maximum Continuous	11,670 RPM	9,900 lb	<p>The Model A-4M is a single-place, carrier-based, light-attack or close-support airplane. It is an improved version of the Model A-4F. A more powerful engine, the J52-P-408, has been installed in lieu of the J52-P-8A, and the engine tailpipe has been vectored to improve nosewheel liftoff characteristics. Other changes which have been incorporated are the TIAS probe, enlarged canopy to provide improved visibility, increased ammunition capacity, and drag chute for improved field landing capability. The A-4M can operate from all types of carriers, carrying a wide variety of conventional and special weapons. It is capable of in-flight fueling (tanker or receiver).</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 relief of pilot fatigue.</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>Spotting: A total of 175 airplanes can be accommodated in a landing spot on the flight and hangar decks of a CVA-59 class carrier.</p>	<table style="width: 100%; border: none;"> <thead> <tr> <th style="text-align: left;">LOADINGS</th> <th style="text-align: left;">POUNDS</th> <th style="text-align: left;">L.F.</th> </tr> </thead> <tbody> <tr><td>Empty</td><td>10,418</td><td>--</td></tr> <tr><td>Basic</td><td>11,219</td><td>--</td></tr> <tr><td>Flight Design</td><td>12,504</td><td>7.0</td></tr> <tr><td>Combat</td><td>17,657</td><td>5.0</td></tr> <tr><td>Max. Takeoff</td><td>24,500</td><td>3.6</td></tr> <tr><td>Max. Landing</td><td></td><td></td></tr> <tr><td style="padding-left: 20px;">Arrest</td><td>14,500</td><td>6.0</td></tr> <tr><td style="padding-left: 20px;">Airfield</td><td>16,000</td><td>5.5</td></tr> </tbody> </table>	LOADINGS	POUNDS	L.F.	Empty	10,418	--	Basic	11,219	--	Flight Design	12,504	7.0	Combat	17,657	5.0	Max. Takeoff	24,500	3.6	Max. Landing			Arrest	14,500	6.0	Airfield	16,000	5.5																																												
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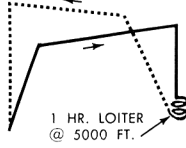
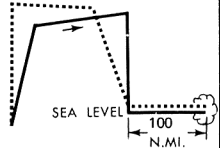
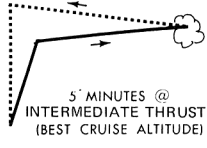
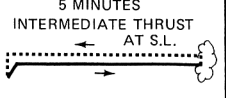
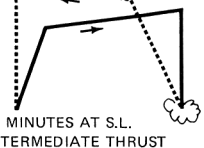
PERFORMANCE SUMMARY

TAKE-OFF LOADING CONDITION	(1) Hi-Hi-Hi Clean Airplane	(3) S.L. Store Delivery 1-MK 28 Store	(5) Close Support 1-300 Gal Tank 12-MK 81 Snakeyes	(7) Close Support 3-AGM 12B (Bullpup A) 2-300 Gal Tanks	(9) Ferry 3-300 Gal Tanks
TAKE-OFF WEIGHT lb.	16,876	19,833	24,045	24,282	24,472
Fuel internal/external (JP-5) lb./lb.	5440/NONE	5440/NONE	5440/2040	5440/4080	5440/6120
Payload lb.	NONE	2040	3600	1710	NONE
Wing loading lb./sq. ft.	64.9	76.3	92.5	93.4	94.1
Stall speed—power-off kn.	117	126	143	142	143
Take-off run at S.L.— calm (A) ft.	1515	2195	3440	3520	3590
Take-off run at S.L.— 25 kn. wind (A) ft.	1010	1520	2500	2565	2620
Take-off to clear 50 ft.— calm (A) ft.	2370	3255	4860	4975	5065
Max. speed/altitude (A) kn./ft.	597/5,000	578/11,500	525/10,000	519/7,500	556/9,500
Rate of climb at S.L. (A) fpm.	13,500	10,500	6450	7250	7600
Time: S.L. to 20,000 ft. (A) min.	1.8	2.7	4.9	4.2	3.8
Time: S.L. to 30,000 ft. (A) min.	3.1	5.1	11.4	9.0	7.6
Service ceiling (100 fpm) (A) ft.	44,300	39,100	32,000	33,300	34,400
Combat range (tanks and stores retained) n.mi.	955	680	635	1080	1615 (C)
Average cruising speed kn.	429	417	385	401	412
Cruising altitude(s) ft.	37,600 — 42,200	33,500 — 37,100	26,900 — 31,900	27,800 — 35,100	28,200 — 38,100
Combat radius/mission time n.mi./hr.	440/2.1	105/0.5 (B)	150/1.8	360/2.8	— — —
Average cruising speed kn.	429	420	396	408	— — —
COMBAT LOADING CONDITION	(2)	(4) Store Retained	(6) Tank Dropped Stores Retained	(8) Tanks Dropped Missiles Retained	(10) Tanks Retained
COMBAT WEIGHT lb.	14,700	17,657	21,822	19,805	18,352
Engine power	INTERMEDIATE	INTERMEDIATE	INTERMEDIATE	INTERMEDIATE	INTERMEDIATE
Fuel lb.	3264	3264	5440	5440	5440
Combat speed/combat altitude kn./ft.	537/38,850	569/S.L.	523/5,000	526/5,000	550/S.L.
Rate of climb/combat altitude fpm/ft.	3600/38,850	12,000/S.L.	6450/5,000	8350/5,000	10,750/S.L.
Combat ceiling (500 fpm) ft.	46,400	40,600	33,250	37,300	39,600
Rate of climb at S.L. fpm.	15,650	12,000	7,650	9,650	10,750
Max. speed at S.L. kn.	595	569	504	519	550
Max. speed/altitude kn./ft.	597/5,000	579/12,000	537/10,500	531/9,000	558/10,000
LANDING WEIGHT lb.	12,368	13,336	13,914	13,871	14,258
Fuel lb.	932	983	1132	1216	1346
Stall speed—power-off/approach power kn./kn.	100/96	104/99	106/102	106/101	109/105
Landing roll — spoilers/spoilers + chute ft./ft.	3390/2365	3570/2500	3680/2580	3670/2570	3750/2620
NOTES					
(A) Intermediate Thrust, takeoff weight, stores and tanks retained.					
(B) With 2–300 gallon tanks, the combat radius is 455 n mi.					
(C) Ferry range is 1740 n mi if tanks are dropped when empty.					
NOTE: All loadings except clean airplane include guns, ammunition, and pylons on all stations.					
Performance Basis: NATC and DAC flight tests of the Models A-4F and TA-4F; Pratt and Whitney Engine Specification No. N-6128 dated 15 November 1968.					

A-4M (J52-P-408)

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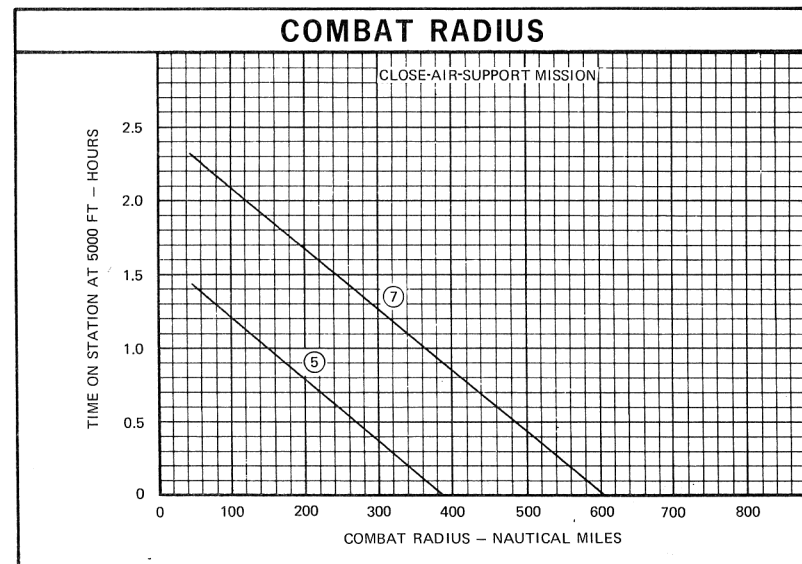
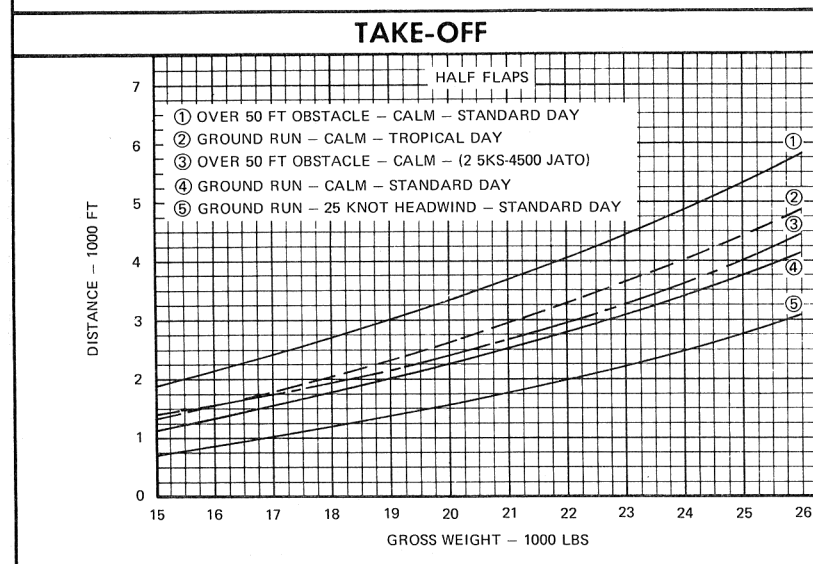
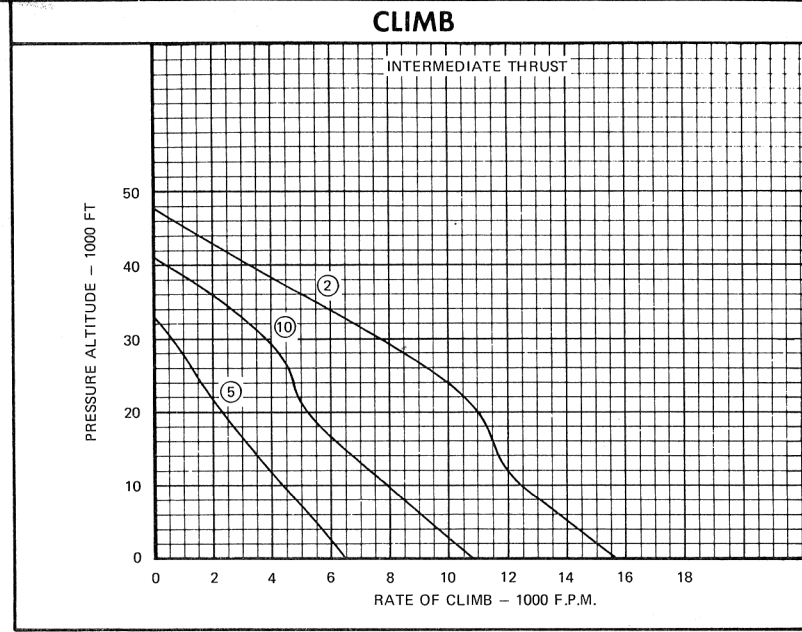
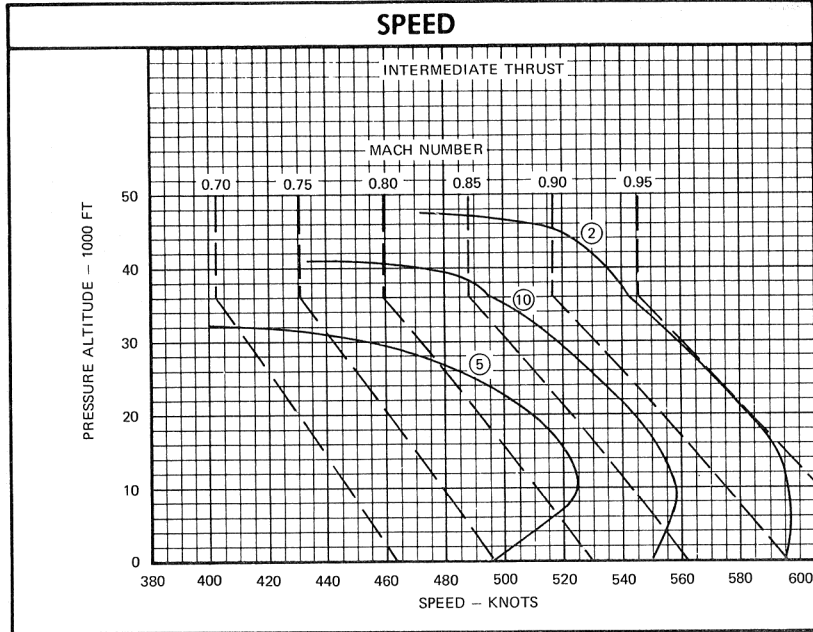
MISSION SUMMARY — ALTERNATE LOADINGS

(A & B)		CLOSE SUPPORT		HI-LO-LO-HI		HI-HI-HI		LO-LO-LO		HI-LO-HI	
											
EXTERNAL STORE LOADING	T.O.G.W.	COMBAT RADIUS n. mi.	MISSION TIME hr.	COMBAT RADIUS n. mi.	MISSION TIME hr.	COMBAT RADIUS n. mi.	MISSION TIME hr.	COMBAT RADIUS n. mi.	MISSION TIME hr.	COMBAT RADIUS n. mi.	MISSION TIME hr.
3 (1) MK 28 STORE	19,833	85 (C)	1.4	145 (C)	1.0	340	1.7	140	1.0	245	1.3
11 (1) MK 28 STORE (2) 300 GAL DROP TANKS	24,310	410	3.0	465	2.5	660	3.2	310	2.1	575	2.8
12 (6) MK 81 SNAKEYES	19,797	65 (C)	1.4	130 (C)	1.0	300	1.6	130	1.0	215	1.1
13 (6) MK 81 SNAKEYES (2) 300 GAL DROP TANKS	24,274	355	2.7	410	2.3	590	3.0	285	2.0	515	2.6
14 (6) MK 82 SNAKEYES	21,387	50 (C)	1.3	130 (C)	1.0	280	1.5	130	1.0	200	1.1
15 (6) MK 82 SNAKEYES (2) 300 GAL DROP TANKS	(D) (E) 25,500	290	2.4	360	2.0	535	2.7	265	1.9	460	2.3
16 (6) MK 82 SNAKEYES (12) MK 81 SNAKEYES	25,437 (D)	---	---	105 (C)	0.8	195	1.1	105	0.8	135 (C)	0.8

- (A) All loadings include guns, ammunition and five pylons.
- (B) Mission time does not include times for warm-up and takeoff, or 20 minutes loiter at sea level.
- (C) Based on cruise at intermediate altitude instead of optimum cruise altitude to obtain maximum climb plus cruise distance.

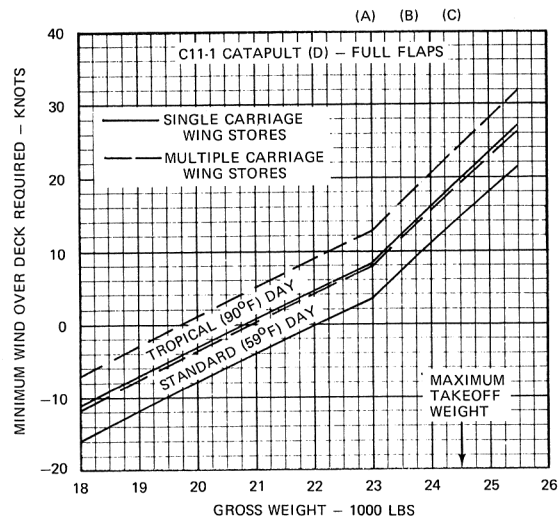
NOTES

- (D) Maximum takeoff weight limit increased in anticipation of demonstrating 25,500 pound takeoff capability.
- (E) 364 lb fuel offloaded to meet maximum takeoff weight limit.
- (F) Data Basis: NATC and DAC flight tests of the Models A-4F and TA-4F; Pratt and Whitney Engine Specification N-6128, dated 11-15-68

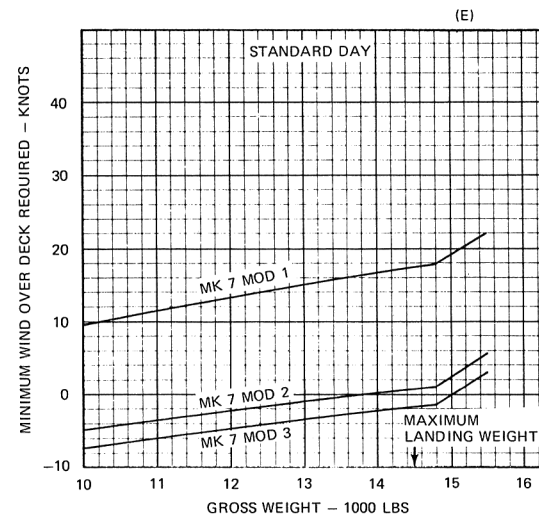


○ LOADING CONDITION COLUMN NUMBER

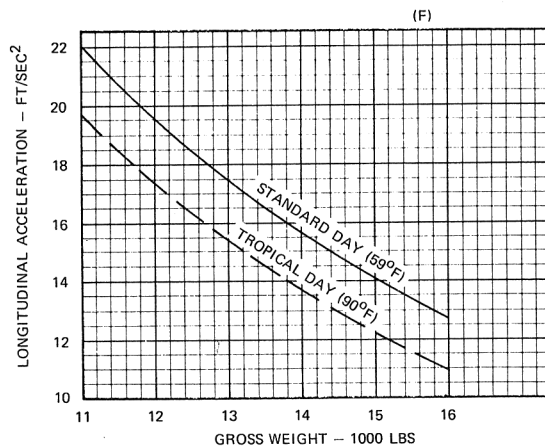
MINIMUM WIND OVER DECK REQUIRED FOR CATAPULTING VS. GROSS WEIGHT



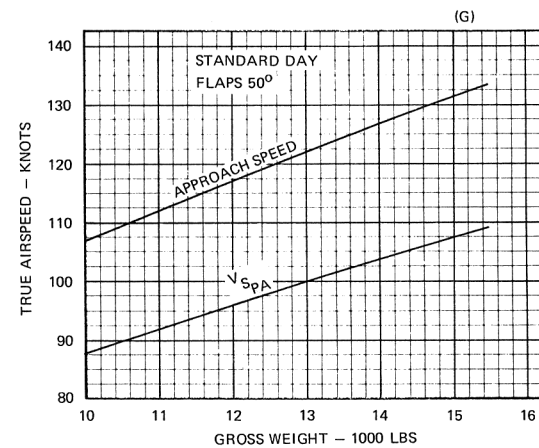
MINIMUM WIND OVER DECK REQUIRED FOR ARRESTING VS. GROSS WEIGHT



WAVE-OFF ACCELERATION



CARRIER APPROACH SPEEDS



NOTES

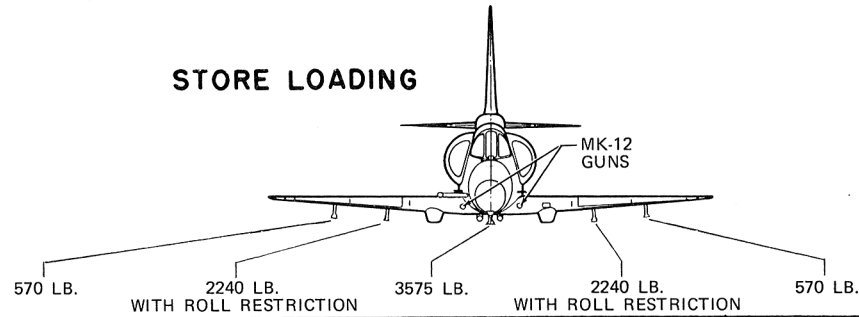
- (A) CATAPULT TAKEOFF SPEEDS ARE DERIVED FROM A CORRELATION OF NATC MINIMUMS ON A-4A, A-4B, A-4E, A-4F AND TA-4F.
- (B) CATAPULT END-SPEED IS LIMITED BY A MAXIMUM LONGITUDINAL ACCELERATION OF 5.47g OR A MAXIMUM TOW FORCE OF 120,000 LB.
- (C) CATAPULT END-SPEEDS CORRESPOND TO METERING ROD CATAPULT SERVICE CHANGES (CSC 271 FOR C11-1; CSC 253 FOR C7)
- (D) MINIMUM WIND OVER DECK REQUIRED FOR C7 CATAPULT IS C11-1 REQUIREMENT MINUS 13 KNOTS.
- (E) ENGAGING SPEED LIMITED BY 5.14g MAXIMUM HORIZONTAL LOAD FACTOR.
- (F) WAVE-OFF ACCELERATION BASED ON LONGITUDINAL ACCELERATION AT APPROACH SPEED.
- (G) APPROACH SPEEDS BASED ON FLEET OPERATIONAL SPEEDS AND CORRESPOND TO A 4° GLIDE SLOPE AT 17-1/2 UNITS ON THE PILOT'S ANGLE-OF-ATTACK INDICATOR.

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SERVICE

NAVAIR OO-II0AA4-9

STORE LOADING

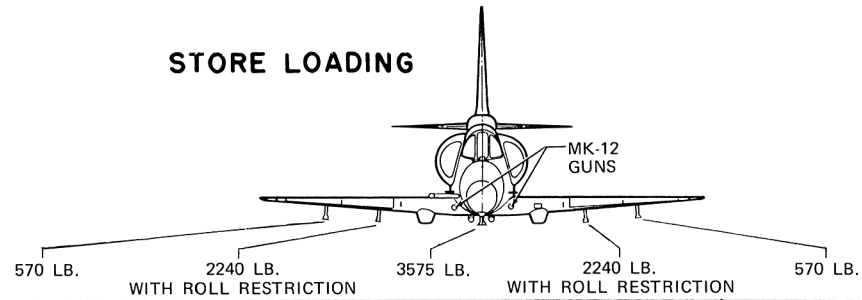


Ordnance		Station No. 5 Right Outboard	Station No. 4 Right Inboard	Station No. 3 Fuselage Centerline	Station No. 2 Left Inboard	Station No. 1 Left Outboard	
Suspension Equipment		1) Aero 20A Rack-Pylon 1) Aero 5A-1 Launcher Adapter 1) Aero 5A Pylon-Launcher 1) A/A 37B-1 MBR	1) Aero 20A Rack-Pylon 1) Aero 1A Adapter 1) MK-44 Missile Cluster Adapter (Lazy Dog) 1) Aero 3A Launcher 1) Aero 5A-1 Launcher Adapter 1) Aero 5A Pylon-Launcher 1) A/A 37B-1 MBR 1) A/A 37B-3 PMBR 1) MER-7 1) TER-7	1) Aero 7A Rack-Pylon 1) MK-44 Missile Cluster Adapter (Lazy Dog) 1) Aero 5A-1 Launcher Adapter 1) Aero 5A Pylon-Launcher 1) A/A 37B-1 MBR 1) A/A 37B-3 PMBR 1) MER-7 1) TER-7	1) Aero 20A Rack-Pylon 1) Aero 1A Adapter 1) MK-44 Missile Cluster Adapter (Lazy Dog) 1) Aero 3A Launcher 1) Aero 5A-1 Launcher Adapter 1) Aero 5A Pylon-Launcher 1) A/A 37B-1 MBR 1) A/A 37B-3 PMBR 1) MER-7 1) TER-7	1) Aero 20A Rack-Pylon 1) Aero 5A-1 Launcher Adapter 1) Aero 5A Pylon-Launcher 1) A/A 37B-1 MBR	
Bombs		1) MK-81 1) MK-81 Snakeye 1) MK-82 1) MK-82 Snakeye 1) AN-M81 (260 lb Frag.) 1) AN-M88 (220 lb Frag.) 1) AN-M57A (250 lb GP) 1) AN-M64A1 (500 lb GP) 1) AN-M30A1 (100 lb GP) 1) MK-94 Chemical 1) MK-77 Fire Bomb 1) Aero 7A (Lazy Dog)	6) MK-81 6) MK-81 Snakeyes 3) MK-82 3) MK-82 Snakeyes 1) MK-83 1) M117 Demolition 5) AN-M81 (260 lb Frag.) 5) AN-M88 (220 lb Frag.) 5) AN-M57A (250 lb GP) 1) AN-M64A1 (500 lb GP) 1) AN-M65A1 (1000 lb GP) 1) AN-M30A1 (100 lb GP) 1) MK-94 Chemical 3) MK-77 Fire Bombs 1) MK-79 Fire Bomb 2) CBU-1A/A 2) CBU-2A/A 1) Aero 7A (Lazy Dog) 1) MK-44 Cluster Adapter (Lazy Dog)	6) MK-81 6) MK-81 Snakeyes 6) MK-82 6) MK-82 Snakeyes 3) MK-83 1) MK-84 1) M117 Demolition 6) AN-M81 (260 lb Frag.) 6) AN-M88 (220 lb Frag.) 6) AN-M57A (250 lb GP) 1) AN-M64A1 (500 lb GP) 1) AN-M65A1 (1000 lb GP) 1) AN-M66A2 (2000 lb GP) 1) AN-M30A1 (100 lb GP) 6) MK-94 Chemical 4) MK-77 Fire Bombs 1) MK-79 Fire Bomb 1) MK-44 Cluster Adapter (Lazy Dog)	6) MK-81 6) MK-81 Snakeyes 3) MK-82 3) MK-82 Snakeyes 1) MK-83 1) M117 Demolition 5) AN-M81 (260 lb Frag.) 5) AN-M88 (220 lb Frag.) 5) AN-M57A (250 lb GP) 1) AN-M64A1 (500 lb GP) 1) AN-M65A1 (1000 lb GP) 1) AN-M30A1 (100 lb GP) 1) MK-94 Chemical 3) MK-77 Fire Bombs 1) MK-79 Fire Bomb 2) CBU-1A/A 2) CBU-2A/A 1) Aero 7A (Lazy Dog) 1) MK-44 Cluster Adapter (Lazy Dog)	1) MK-81 1) MK-81 Snakeye 1) MK-82 1) MK-82 Snakeye 1) AN-M81 (260 lb Frag.) 1) AN-M88 (220 lb Frag.) 1) AN-M57A (250 lb GP) 1) AN-M64A1 (500 lb GP) 1) AN-M30A1 (100 lb GP) 1) MK-94 Chemical 1) MK-77 Fire Bomb 1) Aero 7A (Lazy Dog)	

A-4M (J52-P-408)

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STORE LOADING



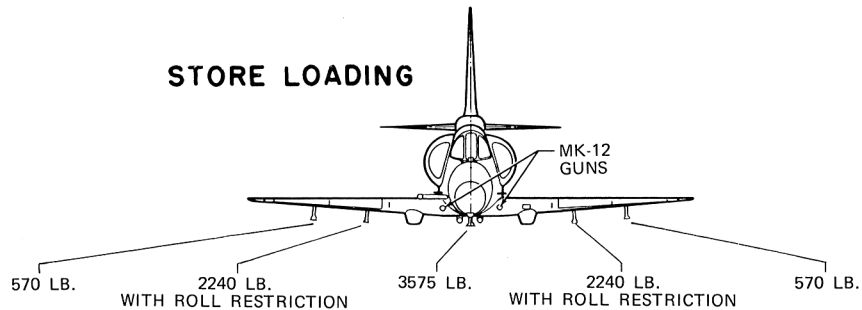
Ordnance	Station No. 5 Right Outboard	Station No. 4 Right Inboard	Station No. 3 Fuselage Centerline	Station No. 2 Left Inboard	Station No. 1 Left Outboard
Guided Missiles	1) AGM-45A Shrike 1) AGM-12A, -12B Bullpup A	1) AGM-45A Shrike 1) AGM-12A, -12B Bullpup A 1) AGM-12C Bullpup B 1) Sidewinder 1A	1) AGM-12A, -12B Bullpup A	1) AGM-45A Shrike 1) AGM-12A, -12B Bullpup A 1) AGM-12C Bullpup B 1) Sidewinder 1A	1) AGM-45 Shrike 1) AGM-12A, -12B Bullpup A
Rocket Launchers	1) LAU-32A/A 1) LAU-3A/A 1) LAU-10/A	2) LAU-32A/A 2) LAU-3A/A 2) LAU-10/A	3) LAU-32A/A 3) LAU-3A/A 3) LAU-10/A	2) LAU-32A/A 2) LAU-3A/A 2) LAU-10/A	1) LAU-32A/A 1) LAU-3A/A 1) LAU-10/A
Mines	1) MK-50 with MK-15 Parapack	1) MK-36 with MK-27 Parapack 1) MK-36 Drill Mine with MK-4 Drill Kit 1) MK-50 with MK-15 Parapack 1) MK-52 with MK-20 Parapack or MK-35 Parapack	1) MK-25 with MK-26 Parapack or MK-34 Parapack 1) MK-25 Drill Mine with MK-4, -5 Drill Kit 1) MK-36 with MK-27 Parapack 1) MK-36 Drill Mine with MK-4 Drill Kit 1) MK-50 with MK-15 Parapack 1) MK-52 with MK-20 Parapack or MK-35 Parapack 1) MK-55 with MK-24 Parapack or MK-36 Parapack 1) MK-56 or 1) MK-56 Drill Mine with MK-28, Mod 1 Parapack	1) MK-36 with MK-27 Parapack 1) MK-36 Drill Mine with MK-4 Drill Kit 1) MK-50 with MK-15 Parapack 1) MK-52 with MK-20 Parapack or MK-35 Parapack	1) MK-50 with MK-15 Parapack
Special Weapons			1) MK-28/MK-104 1) MK-43/BDU-8B /BDU-18 1) MK-57/BDU-12 /BDU-19 1) BDU-11E		
Pyrotechnics	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	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	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	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	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

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SERVICE

NAVAIR OO-IIOAA4-9

STORE LOADING



Ordnance		Station No. 5 Right Outboard	Station No. 4 Right Inboard	Station No. 3 Fuselage Centerline	Station No. 2 Left Inboard	Station No. 1 Left Outboard	
Tanks and Pods		<ul style="list-style-type: none"> 1) LM-119A Film Delivery Container 1) LAU-10/A Leaflet Dispenser 1) GTC-85 Pod-Mounted 	<ul style="list-style-type: none"> 1) 150 Gal Ext Tank 1) 300 Gal Ext Tank 1) MK-12 Mod 0 Chemical Tank 1) ALO-31 ECM Pod 1) ALO-31A Pod 1) MX-900 Chaff Dispenser 1) LM-119A Film Delivery Container 1) LAU-10/A Leaflet Dispenser 1) GTC-85 Pod-Mounted 	<ul style="list-style-type: none"> 1) 150 Gal Ext Tank 1) 300 Gal Ext Tank 1) 400 Gal Ext Tank 1) 300 Gal Buddy Tank 1) Aero 14B Spray Tank 1) ALO-31 ECM Pod 1) ALO-31A Pod 1) MX-900 Chaff Dispenser 1) LAU-10/A Leaflet Dispenser 1) NAVPAC 1) GTC-85 Pod-Mounted 	<ul style="list-style-type: none"> 1) 150 Gal Ext Tank 1) 300 Gal Ext Tank 1) MK-12 Mod 0 Chemical Tank 1) ALO-31 ECM Pod 1) ALO-31A Pod 1) MX-900 Chaff Dispenser 1) LM-119A Film Delivery Container 1) LAU-10/A Leaflet Dispenser 1) GTC-85 Pod-Mounted 	<ul style="list-style-type: none"> 1) LM-119A Film Delivery Container 1) LAU-10/A Leaflet Dispenser 1) GTC-85 Pod-Mounted 	
Training Stores		<ul style="list-style-type: none"> 1) MK-86 WSF 1) MK-87 WSF 6) MK-76, Mod 4, 5 (With MK-10 Lug) 6) MK-89 6) MK-106 Mod 3 6) MK-76 Mod 5 (With MK-14 Lug) 1) Aero 6A-1, 6A-2 1) Aero 7D 	<ul style="list-style-type: none"> 6) MK-86 WSF 6) MK-87 WSF 1) MK-88 WSF 6) MK-76 Mod 4, 5 (With MK-10 Lug) 6) MK-89 6) MK-106 Mod 3 6) MK-76 Mod 5 (With MK-14 Lug) 1) Aero 6A-1, 6A-2 2) Aero 7D 1) FAGU Pipe Organ 1) MK-26 Mod 0 Sidewinder target rocket 	<ul style="list-style-type: none"> 6) MK-86 WSF 6) MK-87 WSF 1) MK-88 WSF 6) MK-76, Mod 4, 5 (With MK-10 Lug) 6) MK-89 6) MK-106 Mod 3 6) MK-76 Mod 5 (With MK-14 Lug) 1) Aero 8A PBC (MK-76, MK-89, MK-106) 1) Aero 6A-1, 6A-2 3) Aero 7D 1) FAGU Pipe Organ 1) Aero 6A, or LAU-32 and A/A37B-3 PMBR with MK-76, Mod 5 or MK-106 Mod 3 1) Banner Tow Target 	<ul style="list-style-type: none"> 6) MK-86 WSF 6) MK-87 WSF 1) MK-88 WSF 6) MK-76 Mod 4, 5 (With MK-10 Lug) 6) MK-89 6) MK-106 Mod 3 6) MK-76 Mod 5 (With MK-14 Lug) 1) Aero 6A-1, 6A-2 2) Aero 7D 1) FAGU Pipe Organ 1) MK-26 Mod 0 Sidewinder target rocket 	<ul style="list-style-type: none"> 1) MK-86 WSF 1) MK-87 WSF 6) MK-76 Mod 4, 5 (With MK-10 Lug) 6) MK-89 6) MK-106 Mod 3 6) MK-76 Mod 5 (With MK-14 Lug) 1) Aero 6A-1, 6A-2 1) Aero 7D 	

NOTES

HI-HI-HI

Warmup, Taxi, Takeoff: Five minutes at sea level static with maximum continuous power
 Climb: On course to optimum cruise altitude with intermediate power
 Cruise out: At maximum range speed at optimum cruise altitude (drop external fuel tanks when empty)
 Combat: Five minutes at optimum cruise altitude with intermediate power (stores on, no distance gained) Stores dropped after combat
 Cruise back: At maximum range speed at optimum cruise altitude
 Reserve: 5% of initial fuel plus 20 minutes at maximum endurance speed at sea level

SEA LEVEL STORE DELIVERY

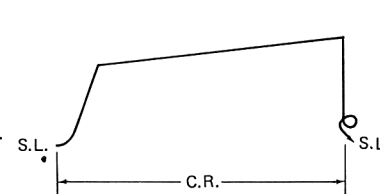
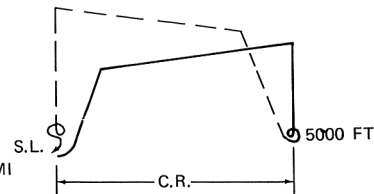
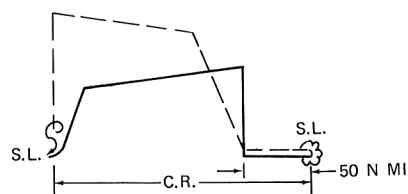
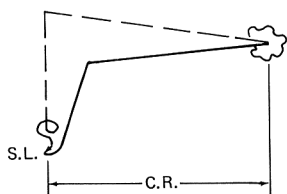
Warmup, Taxi, Takeoff: Five minutes at sea level static with maximum continuous power
 Climb: On course to optimum cruise altitude with intermediate power
 Cruise out: At maximum range speed at optimum cruise altitude (drop external fuel tanks when empty)
 Descend: To sea level when fifty nautical miles from target (no fuel used, no distance gained)
 Run in: Fifty nautical miles at sea level at maximum speed with intermediate power
 Combat: Five minutes at sea level with intermediate power (stores on, no distance gained) Stores dropped after combat.
 Run out: Fifty nautical miles at sea level at maximum speed with intermediate power
 Climb: On course to optimum cruise altitude with intermediate power
 Cruise back: At maximum range speed at optimum cruise altitude
 Reserve: 5% of initial fuel plus 20 minutes at maximum endurance speed at sea level

CLOSE AIR SUPPORT

Warmup, Taxi, Takeoff: Five minutes at sea level static with maximum continuous power
 Climb: On course to optimum cruise altitude with intermediate power
 Cruise out: At maximum range speed at optimum cruise altitude (drop external fuel tanks when empty)
 Descend: To 5000 feet (no fuel used, no distance gained)
 Loiter: One hour at maximum endurance speed at 5000 feet (stores on, no distance gained) Stores dropped at end of loiter
 Climb: On course to optimum cruise altitude with intermediate power
 Cruise back: At maximum range speed at optimum cruise altitude
 Reserve: 5% of initial fuel plus 20 minutes at maximum endurance speed at sea level

FERRY OR COMBAT RANGE

Warmup, Taxi, Takeoff: Five minutes at sea level static with maximum continuous power
 Climb: On course to optimum cruise altitude with intermediate power
 Cruise out: At maximum range speed at optimum cruise altitude
 Reserve: 5% of initial fuel plus 20 minutes at maximum endurance speed at sea level



○ LOADING CONDITION COLUMN NUMBER

NOTES

HI-LO-LO-HI

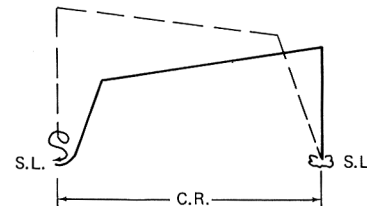
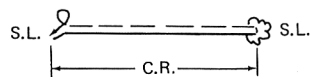
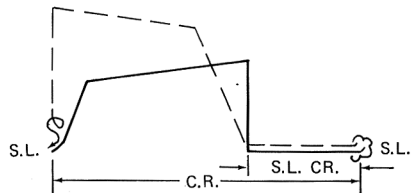
Warmup, Taxi, Takeoff: Five minutes at sea level static with maximum continuous power
 Climb: On course to optimum cruise altitude with intermediate power
 Cruise out: At maximum range speed at optimum cruise altitude (drop external fuel tanks when empty)
 Descend: To sea level when 100/200 nautical miles from target (no fuel used, no distance gained)
 Cruise out: At sea level at maximum range speed to target
 Combat: Five minutes at sea level with intermediate power (stores on, no distance gained) Stores dropped after combat
 Cruise back: At sea level at maximum range speed to a point 100/200 nautical miles from target
 Climb: On course to optimum cruise altitude with intermediate power
 Cruise back: At maximum range speed at optimum cruise altitude
 Reserve: 5% of initial fuel plus 20 minutes at maximum endurance speed at sea level

LO-LO-LO

Warmup, Taxi, Takeoff: Five minutes at sea level static with maximum continuous power
 Cruise out: At maximum range speed at sea level (drop external fuel tanks when empty)
 Combat: Five minutes at sea level with intermediate power (stores on, no distance gained) Stores dropped after combat
 Cruise back: At maximum range speed at sea level
 Reserve: 5% of initial fuel plus 20 minutes at maximum endurance speed at sea level

HI-LO-HI

Warmup, Taxi, Takeoff: Five minutes at sea level static with maximum continuous power
 Climb: On course to optimum cruise altitude with intermediate power
 Cruise out: At maximum range speed at optimum cruise altitude (drop external fuel tanks when empty)
 Descend: To sea level (no fuel used, no distance gained)
 Combat: Five minutes at sea level with intermediate power (stores on, no distance gained) Stores dropped after combat
 Climb: On course to optimum cruise altitude with intermediate power
 Cruise back: At maximum range speed at optimum cruise altitude
 Reserve: 5% of initial fuel plus 20 minutes at maximum endurance speed at sea level



○ LOADING CONDITION COLUMN NUMBER