

SECTION I

DESCRIPTION

TABLE OF CONTENTS

Aircraft.....	1-1
Engines.....	1-2
Aircraft Fuel System.....	1-8
Electrical Power Supply System.....	1-14
Hydraulic Power Supply System.....	1-17
Pneumatic System.....	1-18
Flight Controls.....	1-18
Wing Flaps.....	1-22
Boundary Layer Control System.....	1-23
Speed Brakes.....	1-23
Wing Fold.....	1-23
Landing Gear System.....	1-24
Nose Gear Steering.....	1-24
Wheel Brake System.....	1-25
Arresting Hook System.....	1-26
Drag Chute System.....	1-26
Angle-of-Attack System.....	1-26
Pitot-Static System.....	1-28
Air Data Computer System.....	1-29
Altitude Encoder Unit.....	1-30
Emergency Equipment.....	1-31
Instruments.....	1-34
Flight Director Group.....	1-37
CNI System.....	1-38
Canopies.....	1-56
Lighting Equipment.....	1-57
Oxygen System.....	1-60
MK H7 Ejection Seat.....	1-62
Servicing.....	1-71
Auxiliary Equipment.....	1-71

NOTE

- All references to airspeed in this manual quoted in Knots will equate to CAS.
- The air data computer system compensates for airspeed static source error. In the event of illumination of the STATIC CORR OFF indicator light, all quoted airspeeds should be corrected for static error. Refer to airspeed position error correction charts.
- Throughout the manual, retrofit (TCTO) effectivities are presented in abbreviated form. Refer to the Technical Order Summary at the front of the manual for detailed production/retrofit effectivities.

AIRCRAFT

NOTE

Refer to foldout section for general arrangement illustration.

The F-4 is a two-place (tandem), supersonic, long-range, all-weather fighter-bomber built by McDonnell Douglas Corporation. Mission capabilities include: long-range,

high-altitude intercepts utilizing air-to-air missiles as primary armament; a 20mm gun as secondary armament; long-range attack missions utilizing conventional or nuclear weapons as a primary armament; and close air support missions utilizing a choice of bombs, rockets and missiles as primary armament. Aircraft thrust is provided by two axial-flow turbo jet engines with variable stators and variable afterburner. Airplane appearance is characterized by a low mounted swept back wing with obvious anhedral at the wing tips, and a one piece stabilator with obvious cathedral. Dual, irreversible power control cylinders position the stabilator, ailerons, and spoilers. A single, irreversible hydraulic power control cylinder positions the rudder. An integral pneumatic system, charged by a hydraulically driven air compressor, supplies compressed air for normal and emergency canopy operation, as well as emergency operation for the landing gear and wing flaps. The wings can be folded for ease of airplane storage and ground handling. A drag chute, contained in the end of the fuselage, significantly reduces landing roll distances; and an arresting hook, that is hydraulically retracted, can be utilized to stop the airplane under a wide range of gross weight-airspeed combinations.

DIMENSIONS

The approximate overall dimensions of the aircraft are:

Span (wings spread) - 38 feet, 5 inches

Span (wings folded) - 27 feet, 7 inches

Length - F-4C/D 58 feet, 3 inches

Height - 16 feet, 5 inches

Distance between main landing gear - 17 feet, 11 inches

Minimum recommended turning radius during taxi for radome - 33 feet, 10 inches.

GROSS WEIGHT

The approximate gross weights (to the nearest 500 pounds) are as follows. For specific gross weights refer to the handbook of Weight and Balance Data TO 01-1B-40.

SECTION I

DESCRIPTION

TABLE OF CONTENTS

Aircraft	1-1
Engines	1-2
Aircraft Fuel System	1-9
Electrical Power Supply System	1-14
Hydraulic Power Supply System	1-17
Pneumatic System	1-18
Flight Controls	1-19
Wing Flaps	1-23
Boundary Layer Control System	1-23
Flaps/Slats System	1-24
Speed Brakes	1-26
Wing Fold	1-26
Landing Gear System	1-26
Nose Gear Steering	1-27
Wheel Brake System	1-27
Arresting Hook System	1-29
Drag Chute System	1-29
Angle-of-Attack System	1-29
Pitot-Static System	1-30
Air Data Computer System	1-31
Altitude Encoder Unit	1-34
Emergency Equipment	1-34
Instruments	1-37
Flight Director Group	1-40
CNI System	1-42
Canopies	1-55
Lighting Equipment	1-56
Oxygen System	1-59
MK H7 Ejection Seat	1-62
Servicing	1-70
Auxiliary Equipment	1-70

NOTE

- All references to airspeed in this manual quoted in Knots will equate to IAS.
- Throughout the manual, retrofit (TCTO) effectivities are presented in abbreviated form. Refer to the Technical Order Summary at the front of the manual for detailed production/retrofit effectivities.

AIRCRAFT

NOTE

Refer to foldout section for general arrangement illustration.

The F-4 is a two-place (tandem), supersonic, long-range, all-weather fighter-bomber built by McDonnell Douglas Corporation. Mission capabilities include: long-range, high-altitude intercepts utilizing air-to-air missiles as primary armament; a 20mm gun as secondary armament; long-range attack missions utilizing conventional or nuclear weapons as a primary armament; and close air support missions utilizing a choice of bombs, rockets and missiles as primary armament. Aircraft thrust is provided

by two axial-flow turbo jet engines with variable stators and variable afterburner. Airplane appearance is characterized by a low mounted swept back wing with obvious anhedral at the wing tips, and a one piece stabilator with obvious cathedral. Dual, irreversible power control cylinders, position the stabilator, ailerons, and spoilers. A single, irreversible hydraulic power control cylinder positions the rudder. An integral pneumatic system, charged by a hydraulically driven air compressor, supplies compressed air for normal and emergency canopy operation, as well as emergency operation for the landing gear and wing flaps. The wings can be folded for ease of airplane storage and ground handling. A drag chute, contained in the end of the fuselage, significantly reduces landing roll distances and an arresting hook, that is hydraulically retracted, can be utilized to stop the airplane under a wide range of gross weight-airspeed combinations.

DIMENSIONS

The approximate overall dimensions of the aircraft are:

Span (wings spread) - 38 feet, 5 inches

Span (wings folded) - 27 feet, 7 inches

Length - 63 feet

= F-4E

Height - 16 feet, 5 inches

Distance between main landing gear - 17 feet, 11 inches

Minimum recommended turning radius during taxi for nose boom clearance 41 feet, 1 inch.

GROSS WEIGHT

The approximate gross weights (to the nearest 500 pounds) are as follows. For specific gross weights refer to the handbook of Weight and Balance Data TO 01-1B-40.

Block 35 Aircraft

Operating weight	31,500 lb.
Operating weight, plus a full internal fuel load, and Aero-27A rack	44,500 lb.
Operating weight, plus a full internal fuel load, plus an external centerline tank and the Aero-27A rack	48,500 lb.
Operating weight, plus a full internal fuel load, plus two external wing tanks, and Aero-27A rack	49,500 lb.

Operating weight, plus full internal fuel, plus three external fuel tanks and Aero-27A rack	54,000 lb.
---	------------

Block 41 Aircraft

Operating weight	32,000 lb.
Operating weight, plus a full internal fuel load, and Aero-27A rack	44,000 lb.
Operating weight, plus a full internal fuel load, plus an external centerline tank and the Aero-27A rack	48,500 lb.
Operating weight, plus a full internal fuel load, plus two external wing tanks, and Aero-27A rack	49,500 lb.
Operating weight, plus a full internal fuel load, plus three external tanks and the Aero-27A rack	53,500 lb.

Block 50 Aircraft

Operating weight	33,000 lb.
Operating weight, plus a full internal fuel load, and Aero-27A rack	45,500 lb.
Operating weight, plus a full internal fuel load, plus an external centerline tank and the Aero-27A rack	49,500 lb.
Operating weight, plus a full internal fuel load, plus two external wing tanks and the Aero-27A rack	50,500 lb.
Operating weight, plus a full internal fuel load, plus three external fuel tanks and the Aero-27A rack	55,000 lb.

NOTE

The operating weight is basic weight plus two crewmembers (440 pounds) and engine oil (99 pounds). The weight of the fuel, centerline ejector rack, external stores, and nose gun ammunition must be added to the operating weight to obtain gross weight. Refer to Airplane Loading chart, appendix A or B.

ARMOR PLATING

On aircraft 68-452 and up, provisions are provided for attaching parasitic steel armor plating to doors 15, 16, 22, 23, 28 left and right; and internal ceramic armor in the aft fuselage. This armor, when installed, protects the oxygen bay, hydraulic/engine fuel feed compartment and stabilator actuator. The armor adds approximately 144 pounds to the weight of the aircraft and shifts the CG forward approximately 0.1% MAC.

ARMAMENT

Refer to TO 1F-4E-34-1-1, for information on armament.

ENGINES

The aircraft is powered by two General Electric J79-GE-17 engines. The engines are light-weight (approximately 4000 pounds each), high thrust, axial-flow turbojets equipped with afterburner for thrust augmentation. Under sea level, static test conditions, the engine is rated at 11,870 pounds thrust at Mil power, while at Max power it is rated at 17,900 pounds thrust. The J79 features variable stators (first six stages), a 17 stage compressor, a combustion chamber with 10 annular combustion liners, a three-stage turbine, a variable area exhaust nozzle, and modulated reheat thrust augmentation (afterburning). A turbine type starter, operated by air from an external source or by the expanding gases of a solid propellant cartridge is used to crank the engines for starting. Either the aircraft battery or an external electrical power source is used to provide electrical power during starting. Engine bleed air, taken from the 17th stage of the compressor, is ducted to the boundary layer control system (aircraft without slats), the cockpit air conditioning and pressurization system, and the equipment air conditioning system. From these systems, it is further ducted to supply air to the air data computer, the engine anti-icing system, the fuel tank pressurization system, the pneumatic system air compressor, and the windshield rain removal system.

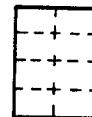
ENGINE FUEL SYSTEM**NOTE**

Refer to foldout section for airplane and engine fuel system illustration.

The fuel system for each engine is complete in itself, and the systems are identical. For clarity, only one system will be discussed. The afterburner fuel system is discussed separately in this subsection. The engine fuel system routes fuel from the engine driven fuel pump to the combustion chambers, where it is discharged in the proper proportion and state of atomization for complete burning. The engine driven fuel pump receives fuel from the aircraft boost pumps after it has passed through a hydraulic/fuel heat exchanger. The engine driven pump ensures a positive fuel pressure to the fuel control which performs the following functions: provides engine speed control by regulating fuel flow; provides fuel surge protection during throttle bursts; limits turbine inlet temperature to a safe value; schedules variable stator vane angle to control airflow through the compressor; supplies signal to the afterburner; and provides positive fuel cutoff at engine shutdown. The fuel control also incorporates a throttle booster which reduces the amount of effort to move the throttles. Teleflex cables link the exhaust nozzle area control and the afterburner fuel control to the engine fuel control, so that fuel flow and nozzle area are compatible throughout the full range of engine operation. Advancing the throttle from OFF to IDLE mechanically opens the fuel cutoff valve in the fuel control. Fuel passing through the cutoff valve flows through a fuel-oil heat exchanger, which effects a transfer

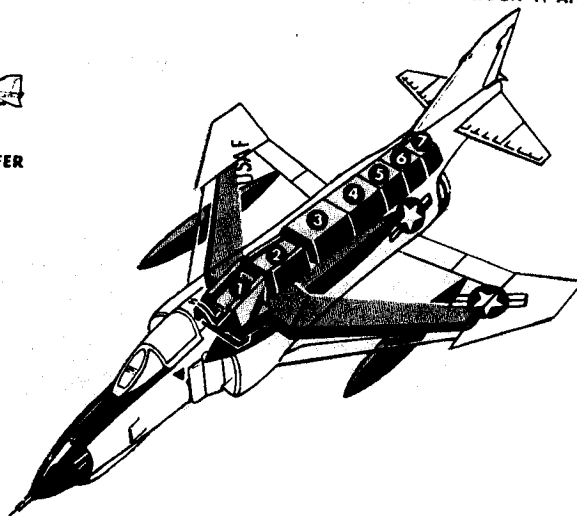
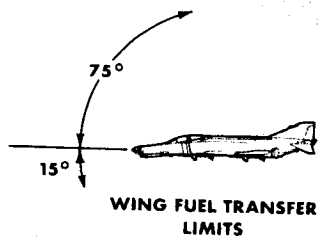
FUEL QUANTITY DATA TABLE

JP-4



TANK	F-4E					
	FULLY SERVICED		THRU BLK 40		BLOCK 41 AND UP	
	GALLONS	POUNDS	GALLONS	POUNDS	GALLONS	POUNDS
FUSELAGE CELL 1			231	1501	215	1397
CELL 2			207	1345	185	1203
CELL 3			164	1066	147	955
CELL 4			221	1436	201	1307
CELL 5			201	1306	180	1170
CELL 6			235	1527	213	1385
CELL 7			104	676	84	546
TOTAL FUSELAGE FUEL	1412	9178	1363	8859	1225	7963
INTERNAL WING TANKS	644	4186	630	4095	630	4095
TOTAL INTERNAL FUEL	2056	13,364	1993	12,954	1855	12,058
EXTERNAL WING TANKS	744	4836	740	4810	740	4810
INTERNAL FUEL PLUS EXTERNAL WING TANKS	2800	18,200	2733	17,764	2595	16,868
EXTERNAL CENTER TANK	602	3913	600	3900	600	3900
INTERNAL FUEL PLUS EXTERNAL CENTER TANK	2658	17,277	2593	16,854	2455	15,958
MAXIMUM FUEL LOAD TOTAL INTERNAL PLUS ALL EXTERNAL TANKS	3402	22,113	3333	21,664	3195	20,768
TOTAL TRAPPED	69	449				
	*93	*605				

*F-4E AIRCRAFT BLOCK 41 AND UP



Note

FUEL WEIGHTS ARE BASED ON THE JP-4 AVERAGE WEIGHT OF 6.5 POUNDS PER GALLON AT 60 DEGREES FAHRENHEIT.

- REFER TO FUEL WEIGHT VARIATIONS, SECTION VII, FOR INFORMATION ON FUEL DENSITY VARIATIONS AND TEMPERATURE EFFECTS ON TOTAL FUEL WEIGHT.
- THE F-4E FULLY SERVICED COLUMN IS VALID THRU BLOCK 40 ONLY. AFTER BLK 40 SUBTRACT 163 GALLONS/ 1070 LB. FROM TOTAL OF VALUES QUOTED IN THIS COLUMN.

Figure 1-3

F-4E

AIRPLANE LOADING**WARNING**

FOR PRECISE BASIC WEIGHT, EXTERNAL STORE AND ATTACHMENT INFORMATION, REFER TO CHARTS C AND E OF THE WEIGHT AND BALANCE DATA HANDBOOK (T.O. 1-18-40) FOR THE PARTICULAR AIRPLANE.

SUSPENSION EQUIPMENT	WEIGHT PER STATION	DRAG PER STATION	STABILITY INDEX NUMBER
AERO 27A EJECTOR RACK	51	N/A	N/A
BRU-5/A (MODIFIED AERO-27A EJECTOR RACK)	45	N/A	N/A
AERO 27A EJECTOR RACK CENTERLINE MER ADAPTER AND SWAYBRACE ADAPTERS	122	3.9	N/A
AERO 27A EJECTOR RACK AND CENTERLINE MER WITH ADAPTER	321	10.0	N/A
INBOARD ARMAMENT PYLON	264	2.6	6.9
INBOARD ARMAMENT PYLON AND TER	359	6.8	13.5
INBOARD ARMAMENT PYLON AND TWO LAU-7A/A OR AERO-3B MISSILE LAUNCHERS	403	3.4	9.1
INBOARD ARMAMENT PYLON AND INBOARD LAUNCHER (AIM-4D)	358	3.2	8.2
INBOARD ARMAMENT PYLON AND INBOARD AND LOWER LAUNCHERS (AIM-4D)	418	3.7	9.5
INBOARD ARMAMENT PYLON AND LAU-34/A MISSILE LAUNCHER	350	4.0	9.3
INBOARD PYLON AND LAU-88/A LAUNCHER	740	13.7	21.5
INBOARD ARMAMENT PYLON WITH TER AND INBOARD AIM-4D LAUNCHER	455	7.4	14.8
OUTBOARD ARMAMENT PYLON	190	2.1	4.3
OUTBOARD ARMAMENT PYLON AND OUTBOARD MER	405	10.1	11.4
OUTBOARD ARMAMENT PYLON AND LAU-34/A MISSILE LAUNCHER	276	3.4	6.8

- Notes**
- ARMAMENT PYLON WEIGHTS ARE BASED ON MAU-12B/A. FOR MAU-12C/A, ADD 9 POUNDS.
 - CENTERLINE STATION (5) WEIGHTS ARE BASED ON AERO 27A. FOR BRU-5/A, SUBTRACT 6 POUNDS.
 - IF NITROGEN BOTTLE IS INSTALLED IN LAU-7A/A MISSILE LAUNCHER, ADD 17.5 POUNDS.

F-4E

STORE	WEIGHT PER STORE (POUNDS)	DRAG PER STORE	UNIT STABILITY NUMBER		
			SINGLE MOUNTED	CLUSTER MOUNTED	
WING TANK AND PYLON	F-2713 E-308	6.4	SEE BELOW		
WITHOUT INBOARD STORES OR PYLONS			20.0	N/A	
WITH INBOARD STORE AND/OR PYLON			30.0	N/A	
WITH INBOARD AIM-4D			44.0	N/A	
WITH INBOARD LAU-88 LAUNCHER			46.5	N/A	
MAC 600-GAL EXT TANK WITH UNUSABLE FUEL	249	9.6	N/A	N/A	
MAC 600-GAL EXT TANK WITH FULL FUEL	4149	9.6	N/A	N/A	
ROYAL JET 600-GAL EXT TANK WITH UNUSABLE FULL	304	9.6	N/A	N/A	
ROYAL JET 600-GAL EXT TANK WITH FULL FUEL	4204	9.6	N/A	N/A	
A/A 37U-15 TOW TARGET SYSTEM (WITH TOW TARGET)	793 (988)	14.3(45.6)	7.0	N/A	
AAVS TYPE IV CAMERA POD	142	4.0	4.1	N/A	
AGM-45A, -45B OR ATM-45 TRAINING MISSILE	400	2.3	2.7	N/A	
AGM-65A MISSILE	463	2.8	17.6	23.5	
AIM-4D MISSILE	134	1.5	2.0	2.0	
AIM-7E-2, -7E-3 MISSILE	435	1.3	2.7	N/A	
AIM-9B, -9E, -9J MISSILE	164	1.3	1.0	1.4	
AAQ-8 IRCM POD (WITH RAT)	235 (264)	2.0	4.4	N/A	
ALE-38 CHAFF DISPENSER	F-536 E-223	8.0	21.0	N/A	
ALQ-71(V)-2	242	WING-2.0 FUS-1.3	4.4	N/A	
ALQ-71(V)-3	350	WING-2.0 FUS-1.3	4.4	N/A	
ALQ-72	237	WING-2.4 FUS-1.6	4.4	N/A	
ALQ-87	300	WING-2.1 FUS-1.4	4.4	N/A	
ALQ-101	232	WING-1.8 FUS-1.1	4.7	N/A	
ALQ-101(V)-8	570	WING-2.0 FUS-1.3	5.0	N/A	
ALQ-119(V)-4, (V)-7, (V)-10	565	WING-2.4 FUS-1.6	9.3	N/A	
ALQ-119(V)-8, (V)-11	307/392	WING-2.4 FUS-1.6	9.3	N/A	
ALQ-119(V)-12, (V)-13, (V)-14	580/319/406	WING-2.5 FUS-1.7	12.2	N/A	
AN/AWG-16 MONITOR CONTROL SET	168	2.0	4.1	N/A	
B28EX, B28RE SPECIAL STORE	2027/2170	4.1	11.2	N/A	
B43 SPECIAL STORE WITH MOD 0 NOSE	2060	4.1	9.2	N/A	
B43 SPECIAL STORE WITH MOD 1 NOSE	2120	4.1	9.2	N/A	
B57 SPECIAL STORE	500	2.2	4.9	N/A	
B61 SPECIAL STORE	708	2.2	2.5	N/A	
BDU-33B/B PRACTICE BOMB	25	0.2	0.6	0.8	
BLU-1/B, -1B/B, -1C/B FIRE BOMB	UNFINNED	865	3.4	10.2	14.3
	FINNED	874	3.8	14.8	18.7
BLU-27/B, A/B, B/B, C/B FIRE BOMB	UNFINNED	850	3.4	10.2	14.3
	FINNED	868	3.8	14.8	18.7
BLU-31/B LAND MINE	800	4.0	2.9	3.9	
BLU-52/B, -52A/B BOMB	375	3.8	10.7	14.3	

N/A - NOT APPLICABLE

F - FULL

N/E - NOT ESTABLISHED

E - EMPTY

Figure A1-1 (Sheet 2 of 4)

STORE	WEIGHT PER STORE (POUNDS)	DRAG PER STORE	UNIT STABILITY NUMBER	
			SINGLE MOUNTED	CLUSTER MOUNTED
CBU-1/A OR CBU-1A/A DISPENSER	F-779 E-151	3.3	10.0	13.3
CBU-2/A DISPENSER	F-779 E-151	3.3	10.0	13.3
CBU-2A/A DISPENSER	F-858 E-151	3.3	10.0	13.3
CBU-2B/A OR CBU-2C/A DISPENSER	F-870 E-158	3.3	10.0	13.3
CBU-7/A, -7A/A DISPENSER (UNFINNED)	F-810 E-157	F-4.4 E-6.9	13.0	13.0
CBU-9/A DISPENSER	F-688 E-158	3.3	10.0	13.0
CBU-12/A DISPENSER	F-650 E-158	3.3	10.0	13.0
CBU-14A/B OR CBU-29A/B DISPENSER	825	4.2	7.4	9.9
CBU-24/B OR CBU-29/B DISPENSER	811	4.2	7.4	9.9
CBU-24B/B OR CUB-29B/B DISPENSER	832	4.6	7.4	9.9
CBU-24C/B, -49C/B DISPENSERS	802/810	4.6	7.4	9.9
CBU-28/A DISPENSER (UNFINNED)	F-450 E-157	F-4.4 E-6.9	13.0	13.0
CBU-30/A DISPENSER (UNFINNED)	F-385 E-157	F-4.4 E-6.9	13.0	13.0
CBU-42/A DISPENSER (FINNED)	F-919 E-247	F-3.3 E-5.6	14.0	14.0
CBU-38/A DISPENSER (UNFINNED)	F-702 E-157	F-4.4 E-6.9	13.0	13.0
CBU-46/A DISPENSER	F-890 E-158	3.3	10.0	13.3
CBU-49/B DISPENSER	818	4.2	7.4	9.9
CBU-49A/B DISPENSER	823	4.2	7.4	9.9
CBU-49B/B, -52A/B, DISPENSERS	839	4.6	7.4	9.9
CBU-52/B	692	4.6	7.4	9.9
CBU-52B/B DISPENSER	777	4.6	7.4	9.9
CBU-58/B, -71/B DISPENSER	840	4.6	7.4	9.9
CBU-70/B DISPENSER	718	4.6	7.4	9.9
COMBAT DOCUMENTATION CAMERAS	16	3.7 (PAIR)	N/A	N/A
GBU-8/B (MK-84 EO GUIDED BOMB)	2286	4.8	23.5	N/A
GBU-9/B (M118 EO GUIDED BOMB)	3450	8.0	N/E	N/A
GBU-10/B (MK84 LASER GUIDED BOMB)	2052	6.3	26.2	N/A
GBU-11/B (MK84 LASER GUIDED BOMB)	3065	8.2	66.0	N/A
GBU-12/B (MK82 LASER GUIDED BOMB)	HIGH SPEED FIN	2.3	9.4	12.5
	LOW SPEED FIN	3.1		
LAU-3/A ROCKET POD	WITH NOSE AND TAIL CONE	427	4.1	10.1
	WITHOUT NOSE AND TAIL CONE (EMPTY)	71	5.8	10.1
LAU-59/A ROCKET POD	WITH NOSE AND TAIL CONE	173	1.6	3.9
	WITH NOSE AND WITHOUT TAIL CONE	171	2.1	3.9
	WITHOUT NOSE AND TAIL CONE (FULL)	169	5.4	3.9
	WITHOUT NOSE AND TAIL CONE (EMPTY)	49	2.5	3.9
LAU-68A/A LAU-68B/A ROCKET PODS	WITH NOSE AND TAIL CONE	211	1.6	3.9
	WITH NOSE AND WITHOUT TAIL CONE	209	2.1	3.9
	WITHOUT NOSE AND TAIL CONE (FULL)	207	5.4	3.9
	WITHOUT NOSE AND TAIL CONE (EMPTY)	67	2.5	3.9

N/A - NOT APPLICABLE F - FULL
 N/E - NOT ESTABLISHED E - EMPTY

Figure A1-1 (Sheet 3 of 4)

F-4E

MINIMUM GO SPEED (WITH SINGLE-ENGINE FAILURE)

AIRPLANE CONFIGURATION
ALL DRAG INDEXES
SLATS OUT
FLAPS DOWN

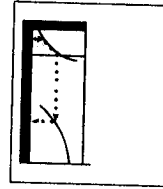
REMARKS
ENGINE(S): (2) J79-GE-17

NOTE

- SINGLE-ENGINE TAKEOFF, WITH AFTERBURNER IGNITED ON OPERATING ENGINE AFTER FAILURE DURING MILITARY THRUST TAKEOFF
- SINGLE-ENGINE TAKEOFF/CLIMB-OUT CAPABILITY IS CRITICAL WITH HIGH GROSS WEIGHT AT LOW DENSITY RATIOS.

DATE: 15 APRIL 1972
DATA BASIS: FLIGHT TEST

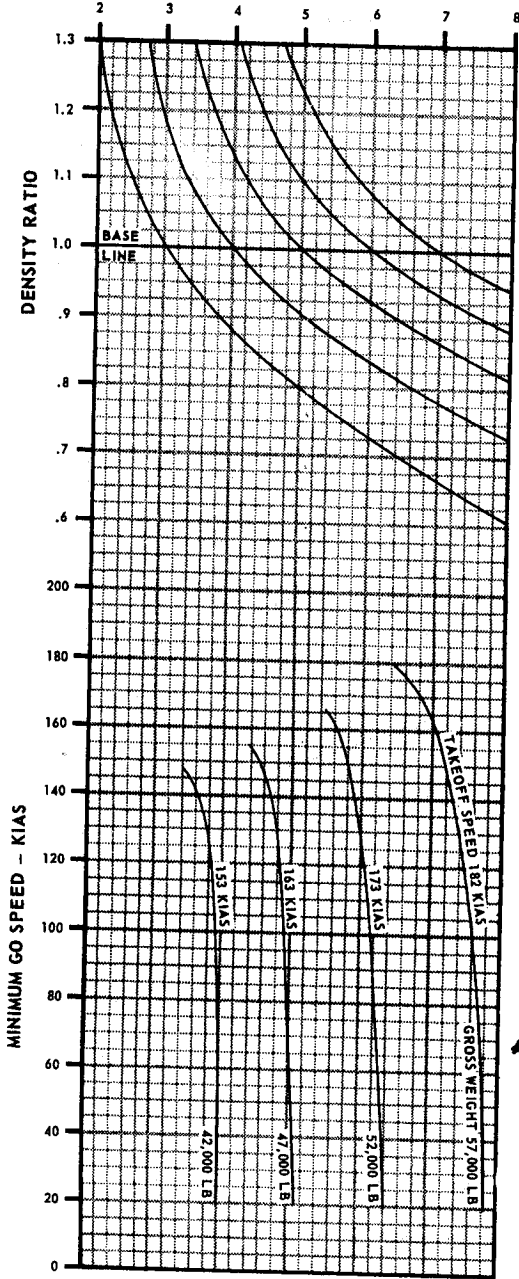
GUIDE



FUEL GRADE: JP-4
FUEL DENSITY: 6.5 LB/GAL

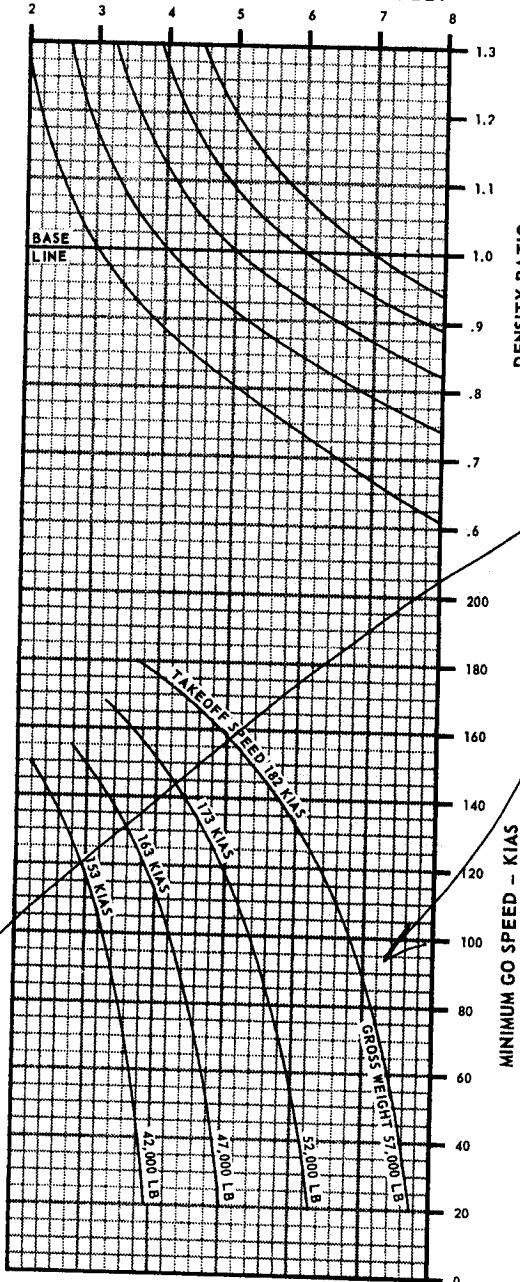
MILITARY THRUST TAKEOFF

AVAILABLE RUNWAY LENGTH - 1000 FEET



MAXIMUM THRUST TAKEOFF

AVAILABLE RUNWAY LENGTH - 1000 FEET



Charts only go up to 57,000 lbs

Figure A2-2

4E-1-(313)

F-4E

TO 1F-4E-1

MAXIMUM ABORT SPEED MAXIMUM THRUST

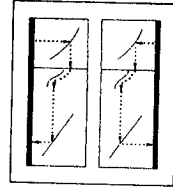
AIRPLANE CONFIGURATION

ALL DRAG INDEXES
SLATS OUT
FLAPS DOWN

REMARKS

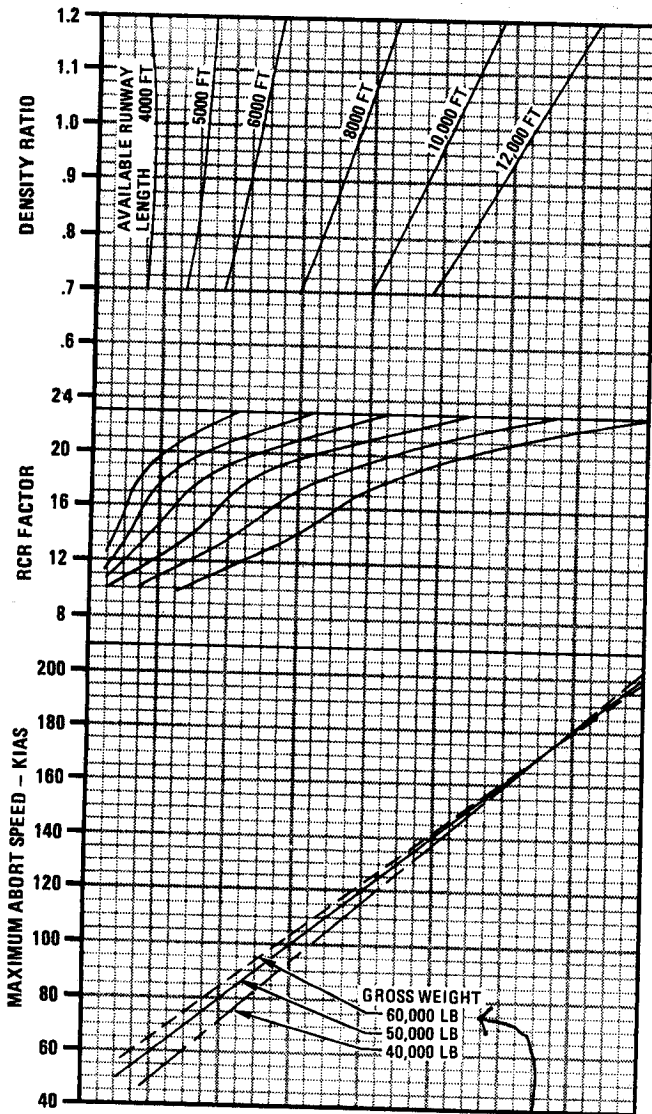
ENGINE(S): (2)J79-GE-17

GUIDE

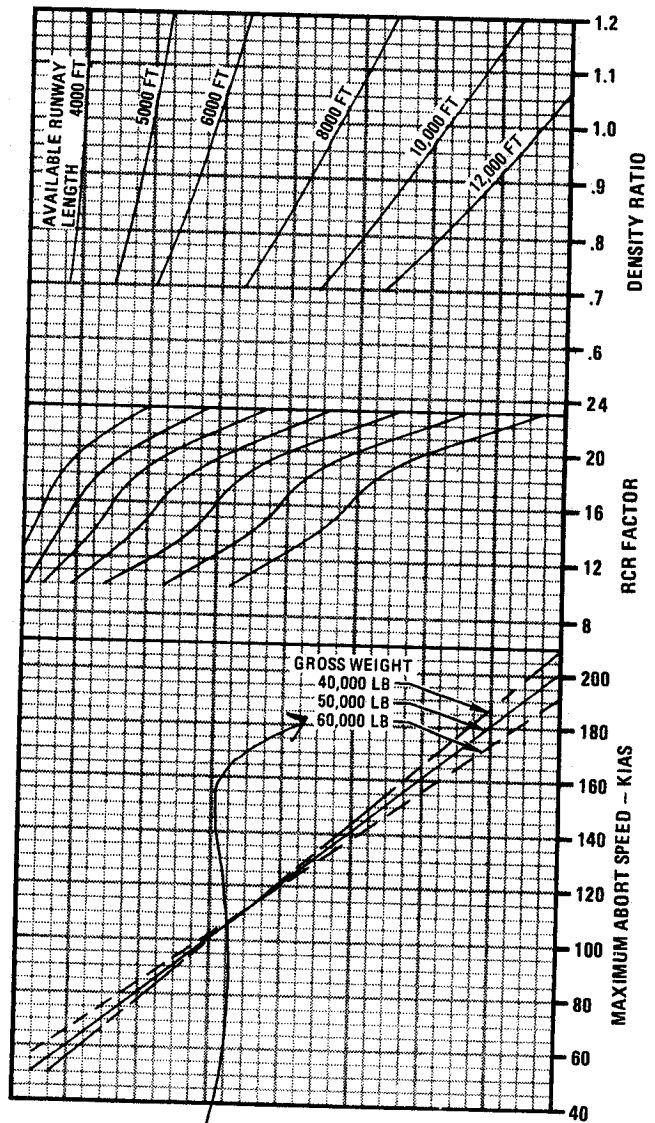


DATE: 1 NOVEMBER 1973
DATA BASIS: FLIGHT TEST

WITHOUT DRAG CHUTE



WITH DRAG CHUTE



Charts only go up to 60,000 lbs

Figure A2-3

4E-1-(314)