

F-16

Block 50/52 (GE129)

Checklists - Main Volume

Not suited for Real Operations
Made for FALCON 4 and suitable only for
BMS version

CONTENTS

Check-lists

- 1 Contents
- 2 Verify Checks / Before Engine Start
- 3 Engine Start / Engine Check AT idle / After Engine Start
- 4 After Engine Start (Continued) item 2 to 8
- 5 After Engine Start (Continued) item 9 to 13
- 6 After Engine Start (Continued) item 14 to 16
- 7 After Engine Start (Continued) item 17 to 19
- 8 Before Taxi / Taxi / If checks
- 9 Before Take Off / Normal Take Off
- 10 Airborne / Aerial Refuelling
- 11 Fence In / Initial Point
- 12 Egress / Fence Out / IF Checks Mnemonics
- 13 Descent / Approach / Before Landing
- 14 Final Approach / Landing / After Landing
- 15 Pre Engine Shut Down / Shut Down
- 16 Hotpit refuel / Supplemental procedures: ILS

Annex1: Blank page for notes

NOTE:

Refer to Cockpit Interior check Rev 1107 for placing all switches before entering the aircraft

VERIFY CHECK

The following items are important switches that if not correctly positioned, could cause a safety hazard and/or improperly operated systems during engine start.
Please refer to cockpit / interior checklist for a full cockpit check.

- | | |
|-----------------------|-------------------------|
| 1. FUEL MASTER switch | ON – Guard down |
| 2. ENGINE FEED knob | NORM |
| 3. EPU switch | NORM – Guard down |
| 4. ENG CONT switch | PRI – Guard down |
| 5. THROTTLE | OFF |
| 6. LD GEAR handle | Confirm Down and locked |
| 7. HOOK switch | UP |
| 8. MASTER ARM switch | SAFE (OFF) |
| 9. AIR SOURCE knob | NORM |

BEFORE ENGINE START

- | | |
|-----------------------------|---|
| 1. MAIN PWR switch | BATT :
Verify FLCS RLY light ON |
| 2. FLCS PWR TEST switch | TEST and hold
Verify lights ON
ACFT BATT TO FLCS
FLCS PMG
FLCS PWR (4)
Verify FLCS RLY light OFF |
| 3. FLCS PWR TEST switch | Release |
| 4. MAIN PWR Switch | MAIN PWR:
Verify lights ON
ELEC SYS
HYD/OIL PRESS
FLCS RLY
SEC
ENGINE |
| 5. EPU GEN & EPU PMG lights | Confirm OFF |
| 6. Communications | All set to assigned UHF Backup |
| 7. Canopy | Closed – locked - no light |

Note:
To prevent possible depletion of battery power, do not allow MAIN PWR switch to remain in BATT or MAIN PWR for more than 5 minutes without engine running.

STARTING ENGINE (GE129)

- | | |
|-------------------------|---|
| 1. JFS | START 2 |
| | check JFS light ON |
| 2. THROTTLE | Advance to IDLE at 20% RPM minimum. |
| 3. Idle Detent | Toggle (Unless idle/cutoff code enabled in bmsconfig) |
| 4. SEC caution light | Check OFF around 20% RPM |
| 5. ENGINE warning light | OFF at 60% RPM |
| 6. JFS Switch | Confirm OFF (snaps OFF at 55% RPM) |
| 7. HYD/OIL PRESS light | OFF between 15 and 70% RPM |

Note :

Engine light-off occurs within 10 seconds after throttle advance and is indicated by an airframe vibration and an increase in RPM followed by an increase of FTIT. Without external power connected, only the RPM and FTIT indicators function until the standby generator is online.

ENGINE CHECK AT IDLE

- | | |
|----------------------------|--|
| 1. FUEL FLOW | 700 – 1700 PPH |
| 2. OIL pressure | MIN 15 PSI |
| 3. NOZ POS | Greater than 94% |
| 4. RPM | 62 – 80% |
| 5. FTIT | Below 650°C |
| 6. HYD PRESS A&B | 2850 - 3250psi - around 12 O'clock position |
| 7. Throttle cutoff release | Check – Attempt to retard the throttle to OFF without depressing the cutoff release. |

AFTER ENGINE START

1. TEST switch panel check:

- PROBE HEAT switch: PROBE HEAT: check caution light OFF
TEST: check caution light flashes
OFF
- Fire and Overheat Detect Button: TEST & HOLD
 - Check ENG FIRE Warning light ON
 - Check OVER HEAT caution light
 - Check MASTER CAUTION light ON

- MAL&IND LTS button: DEPRESS and HOLD

Proper VMS operation is verified by the presence of each word in priority sequence.

AFTER ENGINE START (Continued)

2. AVIONICS POWER Panel

- a. MMC (FCC) switch: ON
- b. ST STA (SMS) switch: ON
- c. MFD switch: ON
- d. UFC switch: ON
- e. DL (MAP) switch: ON
- f. GPS switch: ON
- g. INS: Select ALIGN NORM

3. SNSR PWR panel:

- a. LEFT HDPT switch: OFF unless required
- b. RIGHT HDPT switch: As required
- c. FCR switch: FCR
- d. RDR ALT switch: STBY

4. HUD Panel: As desired Set HUD SYM WHEEL ON

5. CNI (C&I) knob : UFC

6. DTC: Load (always load the DTC prior to setting up the UFC subpages)

7. UFC radio: Set COM1 & COM2 frequency as briefed.

8. MFL: Reset (MFD TEST page)

9. SEC check :

May be delayed until the BEFORE TAKEOFF

- a. THROTTLE: IDLE
- b. TOE BRAKE: ENGAGE, no PARKING BRAKES
- c. ENG CONT switch: SEC
- d. SEC Caution Light: ON - Nozzle: Less than 5%
- e. RPM: Stabilized
- f. THROTTLE: Snap to MIL
then snap to IDLE when RPM reaches 85%.
Check for normal indication and smooth operation.
- g. NOZ POS: 10% or less within 30 sec after selecting SEC.
- h. ENG CONT switch: PRI
- i. SEC Caution Light: OFF
- j. NOZ POS: Greater than 94%

10. FLIGHT CONTROLS: CYCLE & CHECK

AFTER ENGINE START (Continued)

11. FLCS BIT: **Initiate and monitor.**

Position BIT switch to BIT. The RUN light ON FLCP illuminates.

At successful completion of BIT (approximately 45seconds) the RUN light goes OFF, the BIT switch returns to OFF and the FAIL light and FLCS warning light remain OFF. A BIT pass message appears on the FLCS MFD page

Note:

If the FLCS BIT reports a failure through the FLCS warning light and the FAIL light on the FLCP, the failure cannot be reset. The BIT must be reinitiated. In this case, the RUN light and the FAIL light are simultaneously illuminated for the first steps of the BIT, after which the FAIL light goes OFF unless BIT detects a subsequent failure.

12. SPD BRK switch: **Cycle**

13. WHEELS down lights: **Three green**

14. FUEL QTY SEL knob Check

The following Values are based on JP-4 or JP5/8

- a. Totalizer qty: Check according to flight planning.
- b. TEST: FWD/AFT fuel low lights ON
Tot: 6000 lbs
A/L – F/R: 2000 lbs
- c. NORM: A/L : 2675/2810 lbs
F/R: 3100/3250 lbs
- d. RSVR: both 460/480 lbs
- e. INT WING: both 525/550 lbs
- f. EXT WING: both 2300/2420 lbs (if 370-gallon carried)
both 3750/3925 lbs (if 600-gallon carried)
- g. EXT CTR: F/R: 1800/1890 lbs
A/L: 0 lbs
- h. FUEL QTY SEL: NORM

15. EPU FUEL QTY: **95 – 102%**

AFTER ENGINE START (Continued)

16. AVIONICS (Program as required and verify (manual or DTC))

- | | |
|-------------------------|------------------------------------|
| a. Threat Warning Aux: | ON |
| b. CMDS | |
| RWR switch: | ON |
| JMR switch: | ON |
| CHAFF cmds switch: | ON |
| FLARE cmds switch: | ON |
| MODE knob: | Set as required |
| PGRM knob: | Set as required |
| c. ECM switch: | Set as required (OPR) |
| d. Threat Warning prime | |
| Handoff | Diamond Float mode (short press) |
| e. MFD | |
| S-Jettison: | Preset Jettison and exit S-J mode |
| Master Mode: | Preset SMS as required for each MM |
| f. AUDIO | |
| COM1&2 Volume | SET & check |
| MSL /Threat Volume | SET & check |
| ILS Volume knob | SET & check |
| g. DED – UFC | |
| ALOW – MSL – BINGO: | Check |
| CRUS – TACAN - IDM: | Check |
| Bullseye: | SET & Mode Selected. |

17. DBU CHECK (AFTER FLCS BIT completed)

- | | |
|---------------------------|-------------------------------|
| a. DIGITAL BACKUP switch: | BACKUP |
| b. DBU ON warning light: | Verify ON |
| c. Operate controls: | All surfaces respond normally |
| d. DIGITAL BACKUP switch: | OFF |
| e. DBU ON warning light: | Verify OFF |

18. TRIM CHECKS

- | | |
|-------------------------|---|
| a. TRIM AP DISC switch: | DISC |
| b. Stick TRIM buttons: | Activate in ROLL and PITCH |
| | No control surface, no indicator motion |
| c. TRIM AP DISC switch: | NORM |
| d. Stick TRIM buttons: | Check and centre |
| | Control surface & indicator motion |
| e. Rudder trim check: | YAW TRIM knob: |
| | Check and centre |

AFTER ENGINE START (Continued)

19. AIR REFUEL CHECKS

- a. AIR REFUEL switch: OPEN
CHECK RDY light ON, DSC light OFF
- b. A/R DISC button: Depress
DSC light ON; RDY Light OFF
then 3sec later, RDY light ON, DSC light OFF
- c. AIR REFUEL switch: CLOSE

20. EPU CHECK

- a. EPU GEN and EPU PMG lights: Confirm OFF
 - b. O²: 100%
 - c. Toe brakes: Engage
 - d. EPU switch: OFF
 - e. EPU switch: NORM
 - f. THROTTLE: 80%
 - g. EPU/GEN TEST switch: EPU/GEN and hold.
Check lights: EPU AIR light ON
EPU GEN and EPU PMG light OFF
FLCS PWR lights ON
EPU RUN light ON within 5 seconds
 - h. EPU/GEN TEST switch: Release (OFF)
 - i. THROTTLE IDLE
 - j. O²: NORMAL
- If no run light within 10 sec, reinitiate test with throttle at IDLE +15%

21. OBOGS CHECK (At least 2 minutes after engine start)

- a. OBOGS BIT switch: BIT
- b. VERIFY LIGHT: OXY LOW (right brow) ON for 10sec then OFF
- c. Pressure: CHECK 25-40 PSI
- d. Mode Lever: PBG/ON (as required)
- e. Diluter lever: NORM
- f. EMERGENCY lever NORM
- g. FLOW indicator Check

BEFORE TAXI

- | | |
|--------------------|---|
| 1. Landing Lights | ON |
| 2. Drift Co Switch | Set Norm |
| 3. INS Check | Check Stage 8.3
Check ALIGN flashes in HUD |
| 4. INS switch | NAV position |
| 5. Aircraft Lights | As SOP (AC ON – Wing/fus: ON – FLASH) |
| 6. QNH | Confirm QNH received from lead or tower |
| 7. Radio Tower | Remove chocks |

Note 1: Beware of spending excessive time checking the aircraft. Always refer to your next TOS.

Note 2: Be sure the AUX flag disappears from the ADI before scrambling.
As long as GPS switch is ON, the Falcon INS will be accurate from 90 seconds after initial alignment (AUX flag going OFF)

Note 3: Excessive use of wheel brakes and/or differential braking is to be avoided Maximum safe taxi speed on ramps is 20Kts. (15kts in turns)
Max 80% RPM

TAXI

- | | |
|-----------------------|---------------------------|
| 1. NoseWheel Steering | Engage |
| 2. Parking Brake | Release |
| 3. Seat | Armed – Caution light OFF |
| 4. Wheelbrakes | Test |
| 5. IDM | Check in sequence |

IF CHECKS

1. Pressure Instruments
 - AIRSPEED: Zero
 - ALTIMETER: Set
 - VVI: Zero – Remember possible errors.
2. Gyroscopic Instruments
 - TURNS: Needle/balls – HSI Following
3. Navigation Instruments
 - NAV: Check correct bearings for WAYPOINTS
 - TACAN: Set TCN channel and Course for Departure
4. Miscellaneous:
 - HUD Compass tape – Track heading change
 - HSD Compass tape – Track heading change
 - HSI Compass tape – Track heading change
 - STDBY Compass - Track heading change
 - Clock and Chrono : Check and Reset
 - Engine instruments: Check

BEFORE TAKE OFF

- | | |
|----------------------------------|--|
| 1. PROBE HEAT switch | PROBE HEAT |
| 2. ALT FLAPS switch | NORM |
| 3. MANUAL TF FLY UP switch | ENABLE |
| 4. Trims | Check PITCH and YAW centred,
ROLL as required |
| 5. ENG CONT switch | PRI |
| 6. Speedbrake | Check closed |
| 7. Departure Clearance | Received |
| 8. Radar Altimeter | Set ON |
| 9. Stores Config Switch | Cat1/Cat3 as required |
| 10. GND JET ENABLE switch | As required |
| 11. External Tanks | Check feeding then NORM |
| 12. Flight Controls | Cycle |
| 13. OIL pressure | Check PSI |
| 14. All warning & caution lights | Check OFF |
| 15. Tacan | Verify reading if available |
| 16. Review Speeds | Commit to memory |
| Rotation , T/O, Climb speeds | |

NORMAL TAKE OFF

- | | |
|-------------------|---|
| 1. HSI | Check on Runway heading |
| 2. Toe brakes | HOLD |
| 3. RPM 90% | Check gauges & lights
Oil pressure increase – nozzle closing
Engine instruments in the green
NO CAUTION / NO WARNING |
| 4. Brakes | Release |
| 5. Throttle | Full MIL, AB as required |
| 6. NWS | Disengage at 70 kts |
| 7. Rotation | As computed |
| 8. Positive Climb | (VSI + Alt) Brakes, Gear Up |

- Normal engine operation during MIL takeoff is indicated by an exhaust nozzle position of 15% or less after 5 seconds at MIL.
- Normal engine operation during an AB takeoff is indicated by the nozzle preopening up to 10% more than MIL when AB is first selected. AB is indicated by an increasing fuel flow and nozzle position.
- Apply Power smoothly, note computed speeds for 8-12 degrees pitch rotation as briefed.
- Do not exceed 14 degrees pitch in rotation.
- Insure LG is up and locked before exceeding 300 knots.
- Since TEF and LG retract at the same time, do not rush LG retraction after takeoff, a significant loss of lift may occur.

AIRBORNE / CLIMB

- | | |
|--------------------|------------------------------------|
| 1. Landing Light | Off |
| 2. U/C | Check Retracted - handle light Off |
| 3. Engine | Gauges in the Green |
| 4. FUEL | Verify Tank feeding and set NORM |
| 5. Radio | Call airborne or visual |
| 6. DED | STP mode, Select NXT |
| 7. MFD | Cycle – As Required |
| 8. DRIFT CO Switch | Set Drift |
| 9. Wingman | Set Formation and Route |

AERIAL REFUELLING***Tanker rejoin :***

- | | |
|-------------|----------------------------------|
| 1. Radio | Request Refuelling (within 10Nm) |
| 2. TCN | Select TCN Channel (Texaco) |
| 3. TCN Mode | SET A/A TR |
| 4. Heading | Course to Intercept (HSI) |
| 5. Altitude | Tanker ALT – 1000 Ft |

Before Precontact:

- | | |
|--------------------------|----------------------|
| 6. Master ARM | Check Safe |
| 7. Sensors | Check Nose Cold |
| 8. EW Mode knob & ECM | STBY and OFF |
| 9. FCR | STBY |
| 10. RDR ALT | STBY |
| 11. EXT Lights | DIM (night) – STEADY |
| 12. ANTI COLLISION light | OFF at Night |
| 13. AIR REFUEL switch | Open |
| 14. AR status indicator | Check RDY Light On |
| 15. Seat | SAFE (As desired) |

Contact:

- | | |
|-------------------------|--------------------------------|
| 16. Boom Operator | Follow Instructions and Lights |
| 17. AR status indicator | Check AR/NWS Light On |
| 18. Fuel Transfer | Monitor (List - #2) |

Disconnect:

- | | |
|---------------------|----------------|
| 19. A/R DISC button | Depress |
| 20. Throttle | Decrease power |

Post Air refuelling:

- | | |
|------------------------|-----------------------|
| 21. Seat | ARM |
| 22. Air Refuel switch | CLOSE |
| 23. Radio | Call DONE refuelling. |
| 24. Master Arm / SMS | As required |
| 25. Tacan | As required |
| 26. EW Mode knob & ECM | As required |
| 27. FCR | As required |
| 28. RDR ALT | As required |
| 29. EXT Lights | As required |

Note: Tanker overtake speed

Over 1Nm : 100 Kts overtake

6000 Ft : 60Kts

5000 Ft : 50Kts

Decrease overtake speed by 10 Kts for every 1000 Ft closure.

When within 1000 Ft to Tanker: Do not exceed 10Kts overtake.

FENCE IN

- | | |
|---------------------------|-------------------------------------|
| 1. Master Mode | As Required AG or AA |
| 2. Master ARM | Set ARM |
| 3. Radar | As Required |
| 4. Chaff/ Flares PGM mode | As Required |
| 5. ECM Jammer | As Required |
| 6. RWR | Check On |
| 7. RWR Mode | Diamond Float mode or as required |
| 7. PFD | Check no Faults |
| 8. Master A/C Lights | Check Off |
| 9. MFD | Cycle/ Req data |
| 10. A/G Weapons | Set release parameters |
| 11. LASER Switch | ON if required |
| 12. Volumes | Check threat, com, msl vol |
| 13. TGP pod | Activate if required – double check |
| 14. AGM65 Missile power | Check ON if required – double check |
| 15. AIM-9 Cooling head | Check Cool |
| 16. CAT config | Check correct |
| 17. Radio Flight | Set Defensive Formation |

Note:

Avoid Radio Chatter when entering enemy airspace unless in case of emergency. Use A/C or hands signals instead.

INITIAL POINT

- | | |
|------------------------|-----------------------------|
| 1. Radio Flight | Split, Weapons Free, Engage |
| 2. Master ARM | Check ARM |
| 3. Weapons | Check SET |
| 4. Attitude | Check Speed and ALT |
| 5. DED A-LOW | SET on Weapon Min release |
| 6. Threat | Assume (A/A) - AWACS |
| 7. Master Mode / Radar | As Required |
| 8. CounterMeasures | Check As Required |
| 9. Radio | Call in HOT |

EGRESS

- | | |
|------------------|------------------------------|
| 1. Heading | Check to friendly airspace |
| 2. Caution Panel | Check for damage |
| 3. Master Mode | As Required (A/A) |
| 4. Awacs | Check Nearest threat |
| 5. MFD | Cycle As Required |
| 6. Store config | Set Cat I (if possible) |
| 7. ECM Jammer | As Required |
| 8. EWMS mode+pgr | At pilot discretion |
| 9. Flight | Rejoin / Cover |
| 10. DED A-LOW | Set for Egress |
| 11. Flight | Check Status & Fuel - Rejoin |

Note:

When engaging an A/A threat, Jettison remaining A/G stores, and select CatI config. If threat is less than 10 Nm, Use Dogfight Mode

FENCE OUT

- | | |
|----------------------------|--------------------------------|
| 1. Threat | Assume A/A Threat - AWACS |
| 2. Master ARM | Set Safe (According to Threat) |
| 3. Laser switch | Set Off |
| 3. Master Mode | Set Nav |
| 4. Radar | Off (According to Threat) |
| 5. ECM Jammer | Off (According to Threat) |
| 6. RWR Mode | As required |
| 7. Chaff/ Flares Auto disp | Set Off |
| 8. PFD | Check no Faults |
| 9. Radio Flight | Fuel Check (Dest or Alt) |

IF CHECKS MNEMONIC

Holding/enroute

- | | |
|----------|----------------------|
| W | Weather |
| H | Holding |
| O | Obtain app clearance |
| L | Letdown plate review |
| D | Descent checks |
| S | Speeds |

Approach setup

- | | |
|----------|----------------------|
| M | Minimas |
| A | Altimeter |
| I | Initial descent rate |
| L | Letdown plate |
| M | Missed Approach |
| A | Approach speeds |
| N | Nav aids |

Note:

For Approach use the F4 Letdown plates

DESCENT

- | | |
|-----------------------------|--|
| 1. Master Mode | Set NAV |
| 2. Master ARM | Set Safe |
| 3. Altimeter | Set & Check (transition ALT)
Check altimeter readings vs HUD altitude |
| 4. Approach plates | Reviewed |
| 5. Instr Mode Select switch | TCN/ILS or NAV/ILS |
| 6. TACAN channel | Set according to approach plate |
| 7. HSI course and bearings | Set according to approach plate |
| 8. GPS | Input coordinates of IAF |
| 9. Speeds | Compute final approach speeds |

APPROACH

See Quick Reference charts volume to compute speeds

- | | |
|----------------|---|
| 1. Radio Tower | Call Inbound |
| 2. Fuel | Check Quantity/Transfer/Balance |
| 3. At IAF | Follow ATC procedures unless Visual Approach. |

BEFORE LANDING

- | | |
|--------------------------|---------------------------------------|
| 1. Radio Tower (5Nm out) | Request Landing |
| 2. A/C Weight | Verify/Update Vref |
| 3. A/C LDG/Taxi Lights | Set On |
| 4. Gear | Check 3green-handle light off |
| 5. Speed brake | Fully Deployed |
| 6. Drift Co switch | Set Norm |
| 7. Traffic | Announce traffic in sight if required |
| 8. Radar/EW | Check all STBY |

Note:

Unless previously cleared aerobatic manoeuvre is not permitted over the airfield.
Pitch and bank should not exceed 70° IAS<250.

FINAL APPROACH

- | | |
|----------------|------------------|
| 1. Speed brake | Extended |
| 2. Gear | Down 3 greens |
| 3. Speed | Vref as computed |
| 4. AoA | Green : 11° |
| 5. Touchdown | 11 to 13° AOA |

Note:

Final approach speed/13° AOA Cross Check:
136 kts + 4 kts per 1000 Pound of FUEL/STORE weight

LANDING

- | | |
|------------------|---|
| 1. Speed | Throttle Idle |
| 2. AOA | Maintain Max 13° for aerobraking |
| 3. Speed 100 kts | Ride the nosewheel on the ground
Maintain AFT stick
Engage NWS at taxi speed or when req. |
| 4. Wheel brakes | As required |

Note:

Smoothly apply moderate to heavy braking to decelerate to taxi speed. Using less than moderate braking increases the likelihood of a hot brake(s)

AFTER LANDING

- | | |
|-------------------------|-------------|
| 1. Speedbrake | CLOSE |
| 2. PROBEHEAT switch | OFF |
| 3. ILS | OFF |
| 4. Landing/ Taxi Lights | As required |
| 5. Radar Alt | OFF |

PRIOR TO ENGINE SHUT DOWN

- | | |
|------------------------|---|
| 1. Radio (tower menu) | Request chocks in place |
| 2. Ejection Seat | Safe |
| 3. RWR PWR | OFF |
| 4. JMR&ECM PWR | OFF |
| 5. Chaff & Flares CMDs | OFF |
| 6. HUD | ICP SYM knob OFF |
| 7. L/R Hardpoints | Power OFF |
| 8. FCR | Power OFF |
| 9. MMC (FCC) | Power OFF |
| 10. ST STA (SMS) | Power OFF |
| 11. MFD | Power OFF |
| 12. UFC/DED | Power OFF |
| 13. D/Link | Power OFF |
| 14. GPS | Power OFF |
| 15. INS | Power OFF |
| 16. EPU | OFF
(No crew chief able to insert the EPU pin) |
| 17. CNI switch | BACKUP |

ENGINE SHUT DOWN

- | | |
|---------------------------|---|
| 1. AIR Source | Set OFF |
| 2. Radios & Volume knobs | All OFF |
| 3. Throttle | - Stabilize at 75-78% RPM for 5-10 sec
- Idle to allow nozzle to open (1 to 2 sec) |
| 4. Throttle (Idle Detent) | Cut OFF position |
| 5. JFS RUN light | Check |

After Main GEN drops offline:

- | | |
|------------------------|------------------------------|
| 6. EPU Light check | EPU GEN / EPU PMG lights OFF |
| 7. Engine FEED switch | Set OFF |
| 8. Master LIGHT switch | OFF |
| 9. Canopy | Open |
| 10. Main Power | OFF -2 clicks when RPM < 20% |
| 11. Oxygen regulator | OFF & 100% |

HOTPIT REFUEL

Prior to HOTPIT Entry

- | | |
|---------------------------|------------------------------------|
| 1. AFTER LANDING CHECKS | Complete |
| 2. Radio Frequency | Check proper tower frequency tuned |
| 3. AIR REFUEL switch | Open ; RDY light ON |
| 4. TACAN power knob | Power OFF |
| 5. GND JETT ENABLE switch | OFF |

Prior to Hot Refuelling

- | | |
|-------------------------------|------------------------|
| 1. EPU switch (safety pin in) | OFF |
| 2. Canopy | As desired |
| 3. Radio | request Hot Refuelling |

During Hot Refuelling

- | | |
|--------------------|---|
| 2. Radio freq | Monitor Tower freq & guard |
| 3. Flight controls | Do not touch - Ensure hands are visible |

Hot Refuelling complete

- | | |
|--------------------------------|---|
| 1. AIR REFUEL switch | CLOSE |
| 2. EPU GEN & EPU PMG lights | Confirm OFF |
| 3. EPU switch (safety pin out) | NORM |
| 4. Taxi | Taxi clear of the hotpit area and contact Tower |

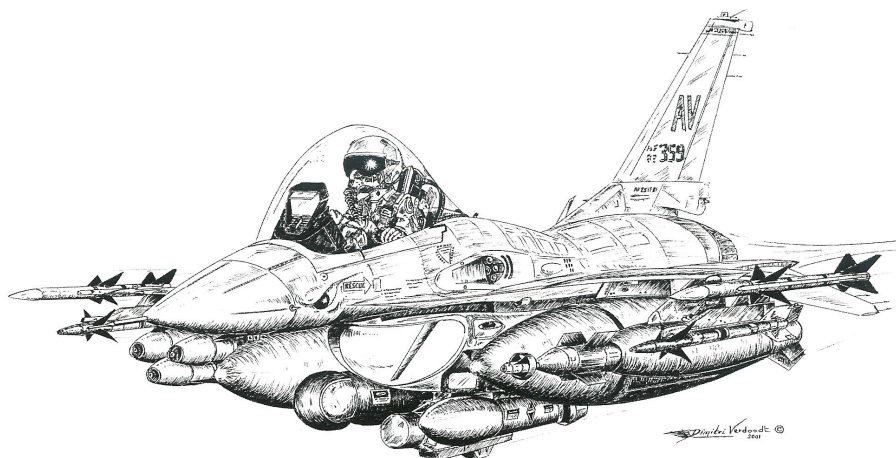
Note:

Hotpit refuelling requires ground crew to establish intercom communication, inspect tires and install the EPU safety pin. This last action is simulated by switching the EPU OFF during hotpit refuel

SUPPLEMENTAL PROCEDURE : ILS

- | | |
|--------------------|--|
| 1. DED | Verify CNI display |
| 2. T-ILS button | Depress and Release |
| 3. ILS frequency | Key in and ENTR |
| 4. DCS | Position asterisks about selectable items. |
| 5. HSI | Set Inbound localizer course |
| 6. INSTR Mode knob | ILS/TCN or ILS/NAV |

PAGE INTENTIONALLY LEFT BLANK
USE FOR NOTES



F-16

Block 50/52 (GE129/PW229)

Checklists – Quick Reference Charts

Not suited for Real Operations
Made for FALCON 4 and suitable only for
BMS version

CONTENTS

Quick reference charts

1. Contents.
2. Takeoff Roll Trim with Asymmetric stores.
3. Takeoff and landing Crosswind limits.
4. Takeoff and Landing datacard.
5. Takeoff Factor.
6. Takeoff Speed and Distance.
7. Takeoff Speed and Distance (Notes)
8. Refusal Speed.
9. Landing Distance.
10. Short Field Landing Distance.
11. Short Field Landing Distance in SEC.
12. Climb / Optimum Cruise (Drag factor = 1.0)
13. Climb / Optimum Cruise (Drag factor = 18.0)
14. Climb / Optimum Cruise (Drag factor = 69.0)
15. Climb / Optimum Cruise (Drag factor = 86.0)
16. Ambient Air Temperature

Annex1: Blank page for notes

NOTE:

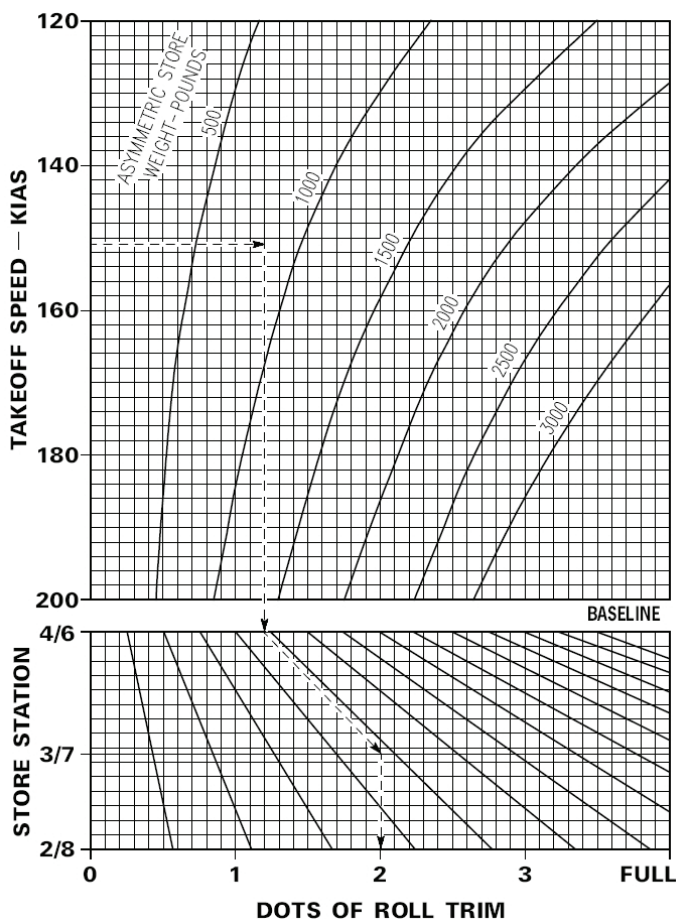
Charts are from the F-16 block 52 PW 229 engine
but should suit F16 block 50 GE 129 engine
Allow 5% variation

TAKEOFF ROLL TRIM WITH ASYMMETRIC STORES

CONFIGURATION: LEF SCHEDULED & TEF at 20°

Notes:

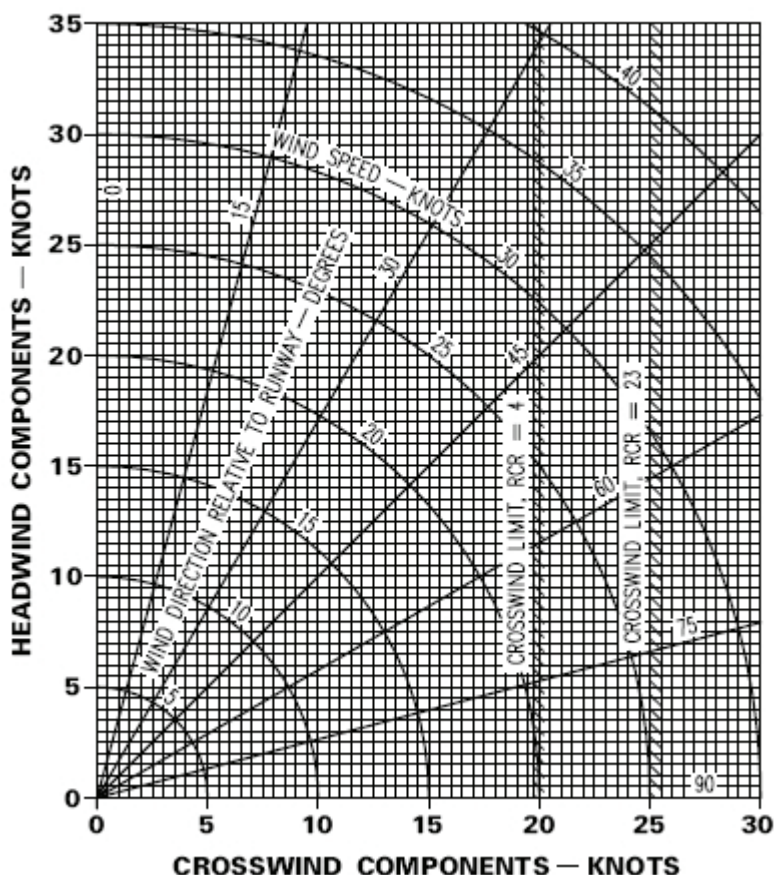
- Increase Takeoff speed 2kts for each dot of roll trim applied to compensate for reduced lift. Takeoff distance increases proportionately to the speed increase.



TAKEOFF & LANDING CROSSWIND LIMITS

Notes:

- Crosswind limits for RCR values 4-23 may be obtained by interpolating between the limits shown.
- Enter chart with steady wind to determine headwind component and with maximum gust velocity to determine crosswind component.



TAKEOFF & LANDING DATA CARD

CONDITIONS:

	TAKE OFF	LANDING
G.W.	_____	_____
Runway Conditions.....	_____	_____
Runway Temp.	_____	_____
Pressure Altitude	_____	_____
Wind	_____	_____
Runway Length.....	_____	_____
Runway Slope	_____	_____

TAKEOFF

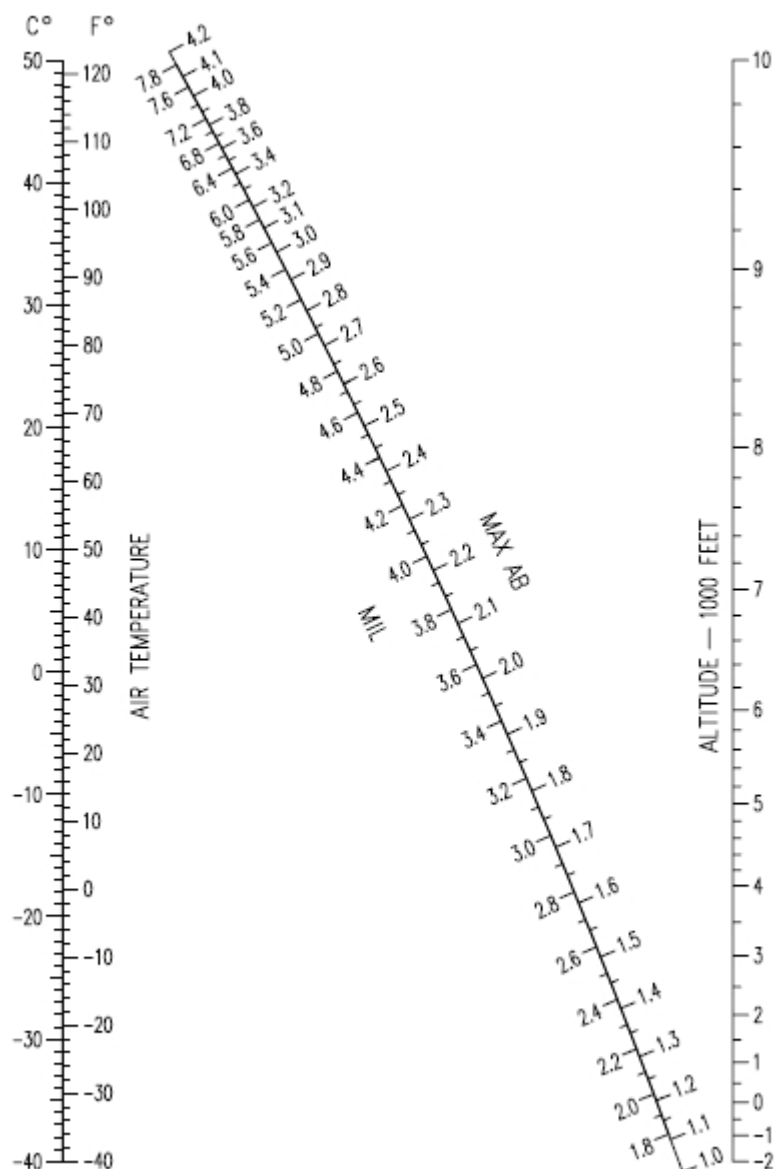
Rotation Speed	_____	CIAS
TAKEOFF Speed/Dist	_____	CIAS _____ Feet
Refusal Speed	_____	CIAS
Max Brake Speed	_____	CIAS

LANDING

Immediately
after Takeoff

Final Landing

	G.W. _____	G.W. _____
Approach Speed	_____	_____
Touchdown Speed	_____	_____
Landing Distance	_____	_____

TAKEOFF FACTOR

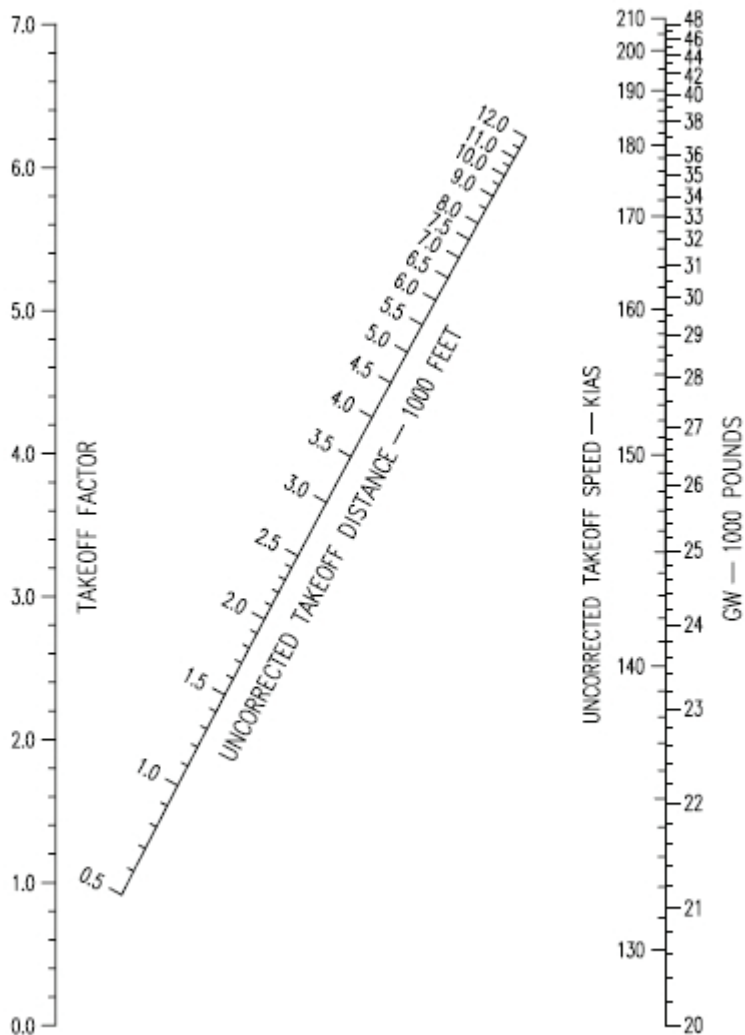
TAKEOFF SPEED & DISTANCE**CONFIGURATION:**

- . All DRAG Indexes
- . CG = 35% MAC
- . ZERO ROLL Trim

CONDITIONS:

- . All Altitudes
- . All temperatures
- . 10° PITCH attitude

Notes (see next page)



TAKEOFF SPEED & DISTANCE (NOTES)**CONFIGURATION:**

- . All DRAG Indexes
- . CG = 35% MAC
- . ZERO ROLL Trim

CONDITIONS:

- . All Altitudes
- . All temperatures
- . 10° PITCH attitude

NOTES:

- Rotate at 10 KIAS (Non-AB) or 15 KIAS (AB) less than Takeoff speed
- Compute % increase/decrease changes individually.
- Increase takeoff speed 8% and distance 18% for a 8° pitch attitude rotation.
- Increase/decrease takeoff speed 0.8 KIAS for each 1% Forward/AFT of 35% MAC
- Increase distance 2% per 100 DRAG INDEX.
- Increase distance 4% per 1% Upslope.
- Increase distance 3.5% per 1% Downslope
- Increase distance 11% per 10 KTS Tailwind.
- Decrease distance 10% per 10 KTS Headwind.
- For takeoff speed correction with ROLL Trim other than zero, refer to Takeoff roll trim with asymmetric stores.

REFUSAL SPEED

CONFIGURATION:

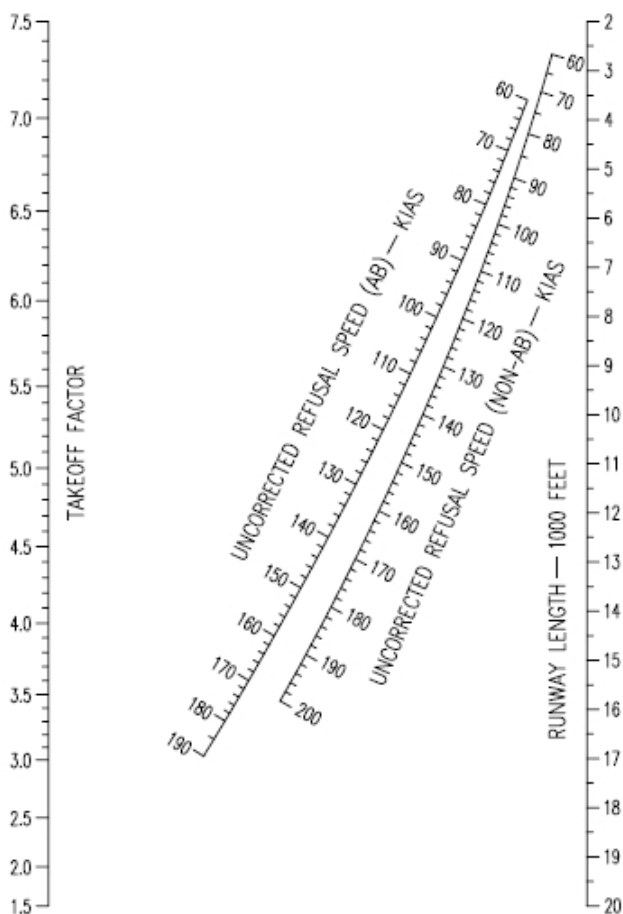
- . All DRAG Indexes
- . Speedbrakes - OPEN
- . GW = 32,000 Lb

CONDITIONS:

- . IDLE selected at refusal speed
- . Max effort Braking
- . DRY concrete (RCR = 23)

NOTES:

- Compute % increase/decrease changes individually.
- For RCR = 16 (DRY) decrease non-AB / AB refusal speed by 4 / 5 KIAS
- Increase/decrease refusal speed 1.1% / 0.9% with non-AB and 0.7% / 0.7% with AB per 1000 Lb less/additional GW.
- Increase / decrease refusal speed 5 / 5 KIAS with Non-AB and 6 / 6 KIAS with AB per 5KTS headwind / tailwind.



APPROACH SPEEDS

CONFIGURATION:

. All DRAG Indexes

CONDITIONS:

. All temperatures

. All altitudes

. 13° AOA (On speed indexer)

NOTES:

- Actual approach airspeed at 11/13° AOA may differ by 5 knots due to variation in aircraft CG.

GROSS WEIGHT (LB)	AIRSPEED (KIAS)
19,000	132
20,000	136
21,000	139
22,000	142
23,000	146
24,000	149
25,000	152
26,000	155
27,000	158
28,000	161
29,000	164
30,000	166
31,000	169
32,000	172
33,000	174
34,000	177
35,000	180
36,000	182
37,000	185
38,000	187
39,000	190
40,000	192
41,000	195
42,000	197
43,000	199
44,000	201
45,000	204
46,000	206
47,000	208
48,000	210
Note : Add 8 KIAS for an 11° AOA approach	

SHORT FIELD LANDING DISTANCE

CONFIGURATION:

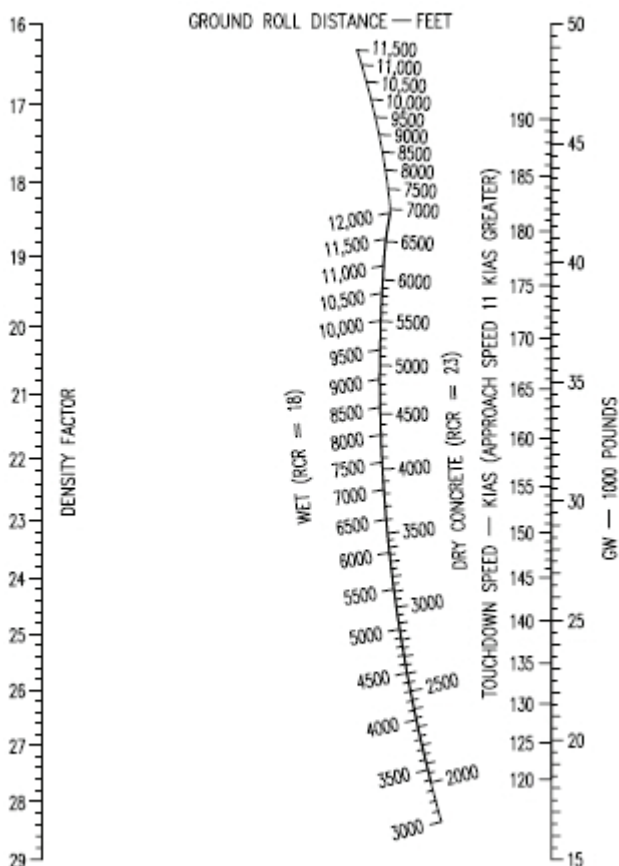
- . All DRAG Indexes
- . Speedbrakes - OPEN

CONDITIONS:

- . Touchdown at 13° AOA.
- . Zero wind & Slope
- . IDLE
- . Max effort braking

NOTES:

- Compute % increase/decrease changes individually.
- Decrease distance 1.5% per 1 KT headwind.
- Increase distance by 2.2% per 1 KT tailwind.



SHORT FIELD LANDING DISTANCE (SEC)

CONFIGURATION:

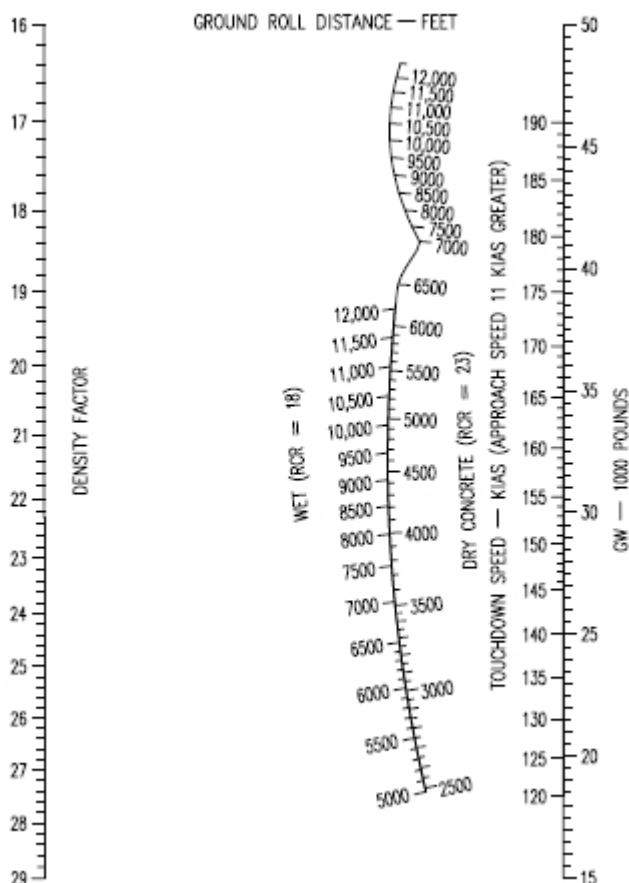
- . All DRAG Indexes
- . Speedbrakes - OPEN

CONDITIONS:

- . Touchdown at 13° AOA.
- . Zero wind & Slope
- . IDLE
- . Max effort braking

NOTES:

- Compute % increase/decrease changes individually.
- Decrease distance 1.5% per 1 KT headwind.
- Increase distance by 2.2% per 1 KT tailwind.



CLIMB / OPTIMUM CRUISE (DRAG FACTOR = 1)

ENGINE: GE129 FUEL: JP-8
FULL INTERNAL FUEL, NO STORES

NOTES:

- STD day/ Fully serviced Fuel = 7162 LB.
- 800 Lb Fuel allowance for Ground operation and Takeoff/acceleration to MIL climb airspeed. (Assume 30 min ground time)
- Climb at KIAS/MACH NO. , whichever is slower

MIL CLIMB					OPTIMUM CRUISE	
ALT 1000 FEET	CLIMB @ KIAS MACH	TIME (MIN)	DIST (NM)	FUEL REMAINING AT LEVEL OFF (LB)	AT LEVEL OFF	
					MACH/KIAS/KTAS	TOTAL FUEL FLOW (LB/HR)
50	---	---	---	---	---	---
45	445 0.87	7.6	63.4	5584	0.87/238/502	2622
40	445 0.87	4.5	37.4	5764	0.87/268/502	2454
35	445 0.81	3.2	25.3	5880	0.81/275/466	2327
30	445 0.80	2.4	18.4	5957	0.80/304/471	2541
25	445 0.73	1.8	13.0	6038	0.73/308/442	2655
20	445 0.70	1.3	8.8	6112	0.70/323/430	2889
10	0.59	0.6	3.4	6231	0.59/325/374	3171
0	0.49	0.0	0.0	6362	0.49/326/326	3488

OPTIMUM CRUISE						
ALT 1000 FEET	5000 LB REMAINING		3000 LB REMAINING		2000 LB REMAINING	
	MACH/KIAS/ KTAS	TOTAL FUEL FLOW (LB/HR)	MACH/KIAS/ KTAS	TOTAL FUEL FLOW (LB/HR)	MACH/KIAS/ KTAS	TOTAL FUEL FLOW (LB/HR)
50	---	---	---	---	---	---
45	0.87/238/502	2540	0.85/231/488	2232	0.85/231/488	2128
40	0.87/268/501	2384	0.84/256/482	2139	0.84/256/482	2069
35	0.80/272/461	2249	0.80/272/461	2127	0.80/272/461	2070
30	0.80/304/471	2496	0.76/289/450	2303	0.75/283/442	2220
25	0.72/301/433	2560	0.70/293/421	2408	0.70/293/421	2369
20	0.69/318/423	2804	0.66/304/405	2609	0.64/297/396	2514
10	0.57/316/363	3040	0.54/301/346	2824	0.53/293/338	2715
0	0.48/316/316	3338	0.46/302/302	3118	0.45/295/295	3008

CLIMB / OPTIMUM CRUISE (DRAG FACTOR = 18)

ENGINE: GE129

FUEL: JP-8

FULL INTERNAL FUEL + EXT CENTERLINE TANK , NO STORES**NOTES:**

- STD day/ Fully serviced Fuel = 7162 LB + 2040 LB = 9202 LB.
- 800 Lb Fuel allowance for Ground operation and Takeoff/acceleration to MIL climb airspeed. (Assume 30 min ground time)
- Climb at KIAS/MACH NO. , whichever is slower

MIL CLIMB					OPTIMUM CRUISE	
ALT 1000 FEET	CLIMB @ KIAS MACH	TIME (MIN)	DIST (NM)	FUEL REMAINING AT LEVEL OFF (LB)	AT LEVEL OFF	
					MACH/KIAS/KTAS	TOTAL FUEL FLOW (LB/HR)
45	----	----	----	----	----	----
40	436 0.85	5.8	47.2	7677	0.85/259/488	2750
35	436 0.83	3.8	30.9	7821	0.83/282/476	2668
30	436 0.80	2.8	22.1	7924	0.80/304/471	2823
25	436 0.74	2.1	15.6	8019	0.74/312/447	2947
20	436 0.70	1.5	10.5	8108	0.70/324/430	3126
10	0.60	0.7	3.9	8255	0.60/332/382	3477
0	0.50	0.0	0.0	8402	0.50/330/330	3776

OPTIMUM CRUISE						
ALT 1000 FEET	5000 LB REMAINING		3000 LB REMAINING		2000 LB REMAINING	
	MACH/KIAS/ KTAS	TOTAL FUEL FLOW (LB/HR)	MACH/KIAS/ KTAS	TOTAL FUEL FLOW (LB/HR)	MACH/KIAS/ KTAS	TOTAL FUEL FLOW (LB/HR)
45	----	----	----	----	----	----
40	0.85/259/486	2488	0.84/256/482	2291	0.84/256/482	2214
35	0.80/272/461	2393	0.80/272/461	2269	0.80/272/461	2210
30	0.78/295/459	2591	0.75/283/442	2389	0.75/283/442	2343
25	0.70/293/421	2625	0.70/293/421	2536	0.70/293/421	2495
20	0.67/311/414	2892	0.65/297/397	2691	0.63/291/388	2594
10	0.56/309/356	3120	0.53/295/340	2904	0.52/288/331	2789
0	0.47/310/310	3421	0.45/297/297	3197	0.44/289/289	3081

CLIMB / OPTIMUM CRUISE (DRAG FACTOR = 69)

ENGINE: GE129

FUEL: JP-8

FULL INTERNAL FUEL + 2 EXT WING TANKS (370Gal) , NO STORES**NOTES:**

- STD day/ Fully serviced Fuel = 7162 LB + 5032 LB = 12194 LB.
- 800 Lb Fuel allowance for Ground operation and Takeoff/acceleration to MIL climb airspeed. (Assume 30 min ground time)
- Climb at KIAS/MACH NO. , whichever is slower

MIL CLIMB					OPTIMUM CRUISE	
ALT 1000 FEET	CLIMB @ KIAS MACH	TIME (MIN)	DIST (NM)	FUEL REMAINING AT LEVEL OFF (LB)	AT LEVEL OFF	
					MACH/KIAS/KTAS	TOTAL FUEL FLOW (LB/HR)
45	---	---	---	---	---	---
40	424 0.85	9.1	74.1	10,363	0.85/259/488	3322
35	424 0.84	5.0	40.7	10,650	0.84/287/484	3170
30	424 0.80	3.6	27.9	10,798	0.80/304/471	3229
25	424 0.75	2.6	19.4	10,921	0.75/315/451	3361
20	424 0.70	1.8	13.0	11,034	0.70/324/430	3482
10	0.60	0.8	4.7	11,222	0.60/333/383	3822
0	0.50	0.0	0.0	11,394	0.50/331/331	4116

OPTIMUM CRUISE						
ALT 1000 FEET	8000 LB REMAINING		5000 LB REMAINING		2000 LB REMAINING	
	MACH/KIAS/ KTAS	TOTAL FUEL FLOW (LB/HR)	MACH/KIAS/ KTAS	TOTAL FUEL FLOW (LB/HR)	MACH/KIAS/ KTAS	TOTAL FUEL FLOW (LB/HR)
45	---	---	---	---	---	---
40	0.85/259/488	3012	0.84/256/482	2655	0.84/256/482	2395
35	0.82/281/475	2891	0.80/272/461	2577	0.78/265/451	2335
30	0.80/304/471	3051	0.76/286/446	2718	0.73/276/431	2460
25	0.72/302/434	3070	0.70/293/421	2815	0.69/288/415	2624
20	0.70/323/429	3322	0.65/301/402	2982	0.61/282/377	2677
10	0.57/319/367	3532	0.54/299/345	3193	0.50/279/322	2858
0	0.48/318/318	3814	0.45/301/301	3493	0.43/282/282	3161

CLIMB / OPTIMUM CRUISE (DRAG FACTOR = 86)

ENGINE: GE129

FUEL: JP-8

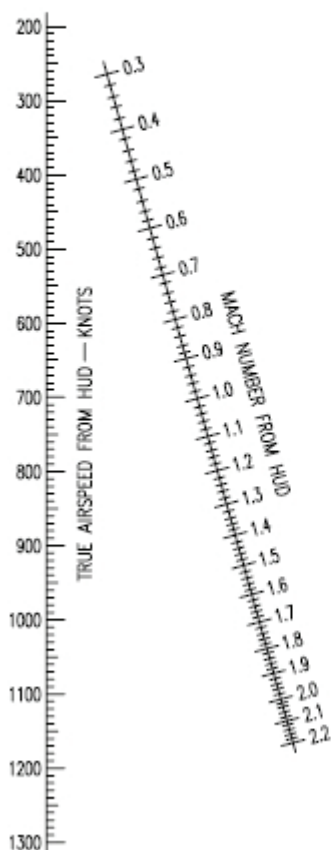
FULL INTERNAL FUEL + 2 EXT WING TANKS (370Gal) + CENTERLINE TANK (300Gal), NO STORES**NOTES:**

- STD day/ Fully serviced Fuel = 7162LB + 5032LB + 2040LB = 14234LB.
- 800 Lb Fuel allowance for Ground operation and Takeoff/acceleration to MIL climb airspeed. (Assume 30 min ground time)
- Climb at KIAS/MACH NO. , whichever is slower

MIL CLIMB					OPTIMUM CRUISE	
ALT 1000 FEET	CLIMB @ KIAS MACH	TIME (MIN)	DIST (NM)	FUEL REMAINING AT LEVEL OFF (LB)	AT LEVEL OFF	
					MACH/KIAS/KTAS	TOTAL FUEL FLOW (LB/HR)
45	---	---	---	---	---	---
40	424 0.85	9.1	74.1	10,363	0.85/259/488	3322
35	424 0.84	5.0	40.7	10,650	0.84/287/484	3170
30	424 0.80	3.6	27.9	10,798	0.80/304/471	3229
25	424 0.75	2.6	19.4	10,921	0.75/315/451	3361
20	424 0.70	1.8	13.0	11,034	0.70/324/430	3482
10	0.60	0.8	4.7	11,222	0.60/333/383	3822
0	0.50	0.0	0.0	11,394	0.50/331/331	4116

OPTIMUM CRUISE						
ALT 1000 FEET	8000 LB REMAINING		5000 LB REMAINING		2000 LB REMAINING	
	MACH/KIAS/ KTAS	TOTAL FUEL FLOW (LB/HR)	MACH/KIAS/ KTAS	TOTAL FUEL FLOW (LB/HR)	MACH/KIAS/ KTAS	TOTAL FUEL FLOW (LB/HR)
45	---	---	---	---	---	---
40	0.85/259/488	3012	0.84/256/482	2655	0.84/256/482	2395
35	0.82/281/475	2891	0.80/272/461	2577	0.78/265/451	2335
30	0.80/304/471	3051	0.76/286/446	2718	0.73/276/431	2460
25	0.72/302/434	3070	0.70/293/421	2815	0.69/288/415	2624
20	0.70/323/429	3322	0.65/301/402	2982	0.61/282/377	2677
10	0.57/319/367	3532	0.54/299/345	3193	0.50/279/322	2858
0	0.48/318/318	3814	0.45/301/301	3493	0.43/282/282	3161

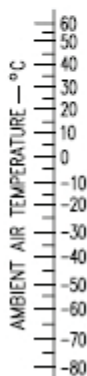
AMBIANT AIR TEMPERATURE



ALTITUDE —1000 FT	STD TEMP	
	°C	°F
SL	15	59
5	5	41
10	-5	23
15	-15	6
20	-25	-12
25	-35	-30
30	-44	-48
35	-54	-66
40	-56	-70
45	-56	-70
50	-56	-70
55	-56	-70
60	-56	-70

$$^{\circ}\text{F} = (9/5 ^{\circ}\text{C}) + 32^{\circ}$$

$$^{\circ}\text{C} = 5/9(^{\circ}\text{F} - 32^{\circ})$$



PAGE INTENTIONALLY LEFT BLANK
USE FOR NOTES