

**PRE-START**

- 1 BOOST PUMPS ..... NORM  
SET RUDDER SHAKER, ANTI-SKID, AFT BAY EQUIP
- 2 V/UHF RADIO ..... TR / TR+G
- 3 EXT & INT LIGHTS ..... SET

**ENGINE START**

- 1 BATT switch ..... ON
- 2 ICS ..... CHECK / SET  
WRN / CAUT LTS TEST, BRAKES 1,500 PSI, LDG GEAR
- 3 THROTTLE ..... CHECK  
*Brake off, full, JPT off, idle, off, JPT on, brake on*
- 4 IGNITERS ..... CHECK  
*Airstart, manual fuel switch*
- 5 EDP / FUEL BIT TEST ..... PERFORM
- 6 CANOPY ..... CHECK / CLOSE
- 7 APU switch ..... ON
- 8 DECS ENABLE switch ..... ON
- 9 FUEL SHUTOFF handle ..... ON  
EFC CYCLE, BRAKE ON, THROTTLE OFF, NOZZLES 10°
- 10 ENGINE START switch ..... ENG ST
- 11 THROTTLE ... (28.4–29.0%, JPT < 545°C) IDLE  
WRN / CAUT LTS TEST, BRAKES > 2,700 PSI, LDG GEAR
- 12 DDI / HUD / COMM ..... ON  
ENG page → IGV angle 31–39° → RESET SORTIE JPT

**BEFORE TAXI**

EHSD page → SET LAT/LONG, MVAR, &amp; SHIP DATA

- 1 INS switch ..... SEA / FIELD: GND  
*Check, enter waypoints, optional: use SINS cable*
- 2 DMT ..... ON
- 3 RADALT / IFF / TCN / LASER ..... SET
- 4 COMMS 1 & 2 ..... SET
- 5 ALQ-164 / ALR-67 / ALE-39 ..... SET
- 6 FLIR ..... ON
- 7 T-R / BOOST PUMPS ..... CHECK  
*L/R BP off → DC (~27V), DC test sw MAIN (>25.5V)  
DC test sw STBY (~25.5V), L/R BP NORM (+2V), DC ctr*
- 8 JPT LIMITERS ..... CHECK  
*JPT off, EFC cycle, JPT on*

**BEFORE TAXI (CONT'D)**

- 9 MANUAL FUEL switch ..... CHECK
- 10 WATER switch ..... CHECK
- 11 EVICS ..... CHECK  
*Throttle 55% then IDLE, check IGV on BIT1*
- 12 FUEL PROP ..... CHECK / ON
- 13 TRIM ..... CHECK / SET 4° ND
- 14 STANDBY INSTRUMENTS ..... CHECK
- 15 SAI ..... UNCAGE, ERECT
- 16 BARO ALTIMETER ..... SET
- 17 OXYGEN switch ..... ON
- 18 FLAPS BIT (1 finger) ..... PERFORM  
*Flaps STOL → Cruise*
- 19 FLIGHT CONTROLS (2 finger) .... CHECK
- 20 SAAHS BIT (3 finger) ..... PERFORM
- 21 PADDLE switch ..... PRESS
- 22 STORES / SMSFF / AUTO BIT ... TEST
- 23 STORES ..... PROGRAM
- 24 TPOD ..... ON
- 25 DP switch ..... CYCLE
- 26 A/R PROBE switch (4 finger) ..... CYCLE
- 27 DDI ..... CHECK PERFORMANCE  
*VRST (BAW, H2O, BDI), VL (OAT, FELV, GWT),  
ODU, ENG (RJPT, JPTL, RHOV), Enter FDAT*
- 28 EHSD / FLIR / HUD / NVGs ... ADJUST
- 29 APU ..... AS REQ
- 30 INS switch ..... IFA or NAV (GPS deg'd)

**TAXI**

V/STOL, FLAPS Cruise, NOZZLES 10°, TRIM 0°,0°,4° ND

- 1 PRK BRAKE / CHOCKS ..... OFF
- 2 ANTI-SKID ..... (FIELD ONLY) CHECK
- 3 BRAKES / NWS ..... CHECK

NIGHT EXT LTS	MSTR	FORM	POS	A-COL	AUX	LAND
FIELD – ST/TAXI	NORM	ON	BRT	ON	AS REQ	
FIELD – TO/LDG						
LHA – ST/TAXI	NORM		OFF	OFF	OFF	OFF
LHA – TO/LDG	NVG	ON	DIM	ON	OFF	OFF

**TAKEOFF XWIND LIMITS**

CTO	20 kts	<b>Wet runway:</b>
STO > 120 kts	15 kts	reduce by 5 kts
STO ≤ 120 kts	10 kts	
(R)VTO	10 kts (5 kts night)	

**MAX WEIGHT**

CTO	32,000 lbs
VTO	20,500 lbs

**PRE-POSITIONING CHECKS**

- 1 CWAIVER checks ..... PERFORM
- 2 CANOPY ..... CHECK / CLOSED
- 3 SEAT ..... ARMED
- 4 INSTRUMENTS ..... CHECK
- 5 APU ..... OFF / NIGHT: ON
- 6 ANTI-SKID switch ..... (LHA: NWS) ON
- 7 ABORT #'s ..... CHECK
- 8 ALTITUDE switch ..... AS DESIRED
- 9 INS knob ..... IFA / NAV
- 10 APPROACH LIGHT ..... ON
- 11 RPS ..... (FIELD ONLY) CHECK

**TAKEOFF CHECKS**

- 1 CONFIGURATION CHECKS (1 finger)  
Canopy, Seat, NRAS, PC, STO stop, Trim, Flaps, Wrn/caut Its
- 2 ENGINE / H2O / CONTROLS (2 / 5 finger)  
ENG page → box Accel (60%): 2.4–3.1s, IGVs 10–21°  
H2O → TO: note RPM rise, reset RPM 60%  
Nozzles: 30° (RPM 60%), duct pres. ~45psi, nozzles: TO

**AFTER TAKEOFF**

- 1 GEAR / FLAPS / NOZZLES ..... SET
- 2 WATER switch ..... OFF
- 3 STO stop ..... CLEAR
- 4 5,000 FT(msl) IGV CHECK .. 80% RPM
- 5 10,000 FT CHECK ..... PERFORM  
*Fuel transfer / quantity, Cabin pressure*
- 6 18,000 FT CHECK ..... PERFORM  
*Altimeter: 29.92, Cabin pressure, APU secure*
- 7 CRUISE ALT..... AOA / ALT X-CHECK

**AIR REFUELING**

- 1 MASTER ARM ..... OFF
  - 2 A/R switch ..... OUT
  - 3 PROBE LIGHT ..... AS DESIRED
- AIRSPEED 190–300 IAS, AoA <13 UNITS*
- 4 FLAPS ..... CRUISE
  - 5 AFC ..... AS DESIRED

**IF FUEL LEVEL IS CRITICAL, SWITCH EXT TANKS TO 'STOP' OR 'ON' TO ENSURE THE FASTEST TRANSFER OF FUEL TO THE ENGINE FEED TANKS**

**DROGUE KC-135 MPRS • S-3B • KC-130 • IL-78**

**CWAIVER**

- c Clock ..... ZULU
- Combat Thrust ..... AS DESIRED
- w Weapons ..... PROGRAMMED  
*Box TONE, SITE/DIR, fuze/Q/M/I, PGMs, IR cool*
- a Avionics / ARBS and FLIR ... SET  
*TPOD: Yardstick (m), designator, FOV (nar-2)  
ARBS: BST, FLTR/GRAY SCALES/NITE  
FLIR: FLRM on, cuer prg, BRT/CNT, REJ → MAN off  
TACAN: Set  
Displays: BRT/CONT/NAVFLIR*
- i IFF ..... SET  
*Verify 3C code, Mode I program, Mode 4 selected*
- v VRS ..... LOCAL, RECORD
- e ECM ..... SET  
*ALE-39: Set to S, verify programs for C, F, A  
ALR-67: BIT, OFST/LIM unboxed, PRI – N  
ALQ-164: As required*
- r RADALT ..... SET  
*LAW on and set, program PUC, GPS on,  
Bomb off (if rel alt. > 2000), GPWS as desired*
- MISC  
*WYPTs, NSEQ string, MAP defaults, design eye  
Lights check, APU as required, A/A TACAN PROX  
TOT, Bingo bug to TIGER*

**TACADMIN (FELPG-F)**

- f Flight Environmental Assessment
- e Expendables ..... SET / CHECK
- l LAW/PUC ..... SET / CHECK
- p PLACE Checks ..... PERFORM  
*Pod, Lights, Armament, C-measures, Emitters*
- g G-WARM ..... PERFORM  
*90° 4G, 90° max anticipated G*
- f "FENCED in, Tapes on"

**IP (MWSS)**

- m MASTER ARM switch ..... ARM
- w Weapon ..... Q/M/I, FUZE
- s System ..... A/G  
*STP, DESG/STP, Map scale, Course, HERRS/VERRS*
- s Sensors ..... DMT / FLIR / TPOD  
*Cascade plan (CCIP>RCIP>GCIP>BCIP)*
- WOF Update (optional)

**ECP**

- 1 MASTER ARM switch ..... OFF
- 2 Battle Damage Assessment
- 3 PLACE Checks.... AS REQUIRED

**RTF**

- 1 Route / Profile / ATC procedures

**DESCENT CHECKS**

- 1 STO Stop ..... CLEAR
- 2 WEATHER .... WIND / VIS / LDG TYPE
- 3 INSTRUMENTS ..... CHECK  
*STP, TCN, CRS, NAVFLIR, HUD, RADALT*
- 4 FUEL.... CHECK / BALANCE / BINGO
- 5 TEMP .... PREHEAT / DEFOG *(as required)*
- 6 APU ..... AS REQUIRED

**LANDING CHECKLIST**

- 1 GEAR ..... DOWN
- 2 FLAPS ..... AS REQUIRED  
*Nozzles > 25° prior to selecting STOL flaps*
- 3 STO Stop ..... CLEAR
- 4 DUCT PRESSURE ..... CHECK
- 5 BRAKE PRESSURE ..... CHECK
- 6 WATER..... AS REQUIRED  
*H2O → T/O, full throttle, check RPM rise, H2O as required*
- 7 WARNING / CAUTION LTS .... CHECK
- 8 LIGHTS ..... AS REQUIRED
- 9 ANTI-SKID switch..... *(LHA: NWS)* ON

**AFTER LANDING CHECKS**

WHEN CLEAR OF ACTIVE RUNWAY:

- 1 TRIM ..... *(LHA: 2° ND)* 4° ND
- 2 FLAPS..... *(LHA: STOL)* CRUISE
- 3 WATER ..... OFF
- 4 IFF .... HOLD, WAIT 10s, AS DESIRED
- 5 MASTER ARM switch ..... SAFE
- 6 SEAT..... *(LHA: ARMED)* SAFE
- 7 OXYGEN switch ..... OFF
- 8 APU ..... OFF
- 9 LANDING LIGHT ..... OFF

WHEN PARKED:

- 10 NOZZLES ..... 0° to 10°
- 11 PARKING BRAKE ..... SET
- 12 ANTI-SKID switch..... *(LHA: NWS)* ON
- 13 FLAPS ..... OFF  
*Record: Engine life, max JPT, fatigue life*  
*Perform: SAAHS BIT, AUTO BIT, other failures, DP cycle*

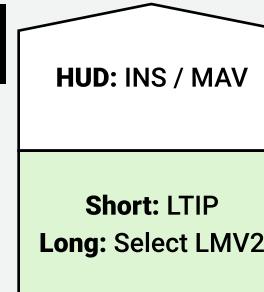
**AFTER LANDING CHECKS (CONT'D)**

- 14 INS UPDATE .... PERFORM / ACCEPT
- 15 FLIR / DMT switches ..... OFF
- 16 TPOD ..... OFF
- 17 SAI ..... CAGE
- 18 INS switch ..... OFF
- 19 DDI / HUD / COMM ..... AS DESIRED
- 20 SDAT ..... ERASE
- 21 ODU ..... ACPT
- 22 THROTTLE ..... OFF
- 23 BOOST PUMPS ..... NORM
- 24 DECS ENABLE switch ..... OFF
- 25 FUEL SHUTOFF handle ..... OFF
- 26 BATTERY switch ..... OFF

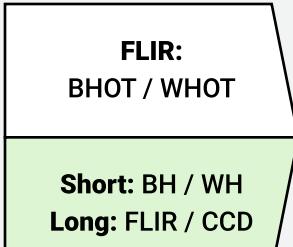
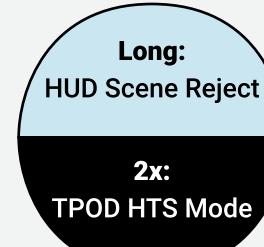
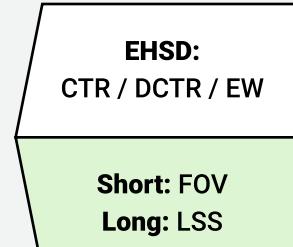
RATING	NOTES	MAX % RPM	MAX °C JPT	COMBINED TIME LIMITS
SHORT LIFT WET	1	120.0	800	A
SHORT LIFT DRY		113.5	780	B
NORMAL LIFT WET	1, 2	116.0	780	C
NORMAL LIFT DRY	2	111.0	765	D
COMBAT		111.0	750	E
MAX THRUST		109.0	710	
MAX CONTINUOUS	2	102.0	645	UNLIMITED
IDLE	5	28.4–29.0	545	UNLIMITED
STARTING	2, 4		475	MOMENTARILY
1. Do not use H2O when OAT < 5°C or > 10,000 ft				A. 15 Seconds
2. Requires pilot action to maintain limit				B. 1.5 Minutes
3. 2.5/10.0 min at lift/cbt sep. by > 1 min below max				C. 2.5 Minutes
4. Slow/abortive starting discontinued before 475°C				D. 10.0 Minutes
5. Minimum allowable sub-idle RPM: 22%				E. 15.0 Minutes

**SSS / STORES**

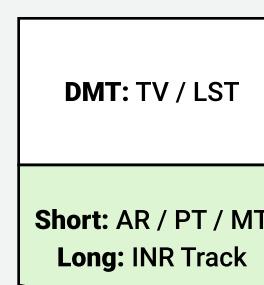
**Equipment**  
**TANK** 300lb Fuel Tank  
**GUN** GAU-12 Gunpod  
**DECM** AN/ALQ-164 DECM  
**TPOD** AN/AAQ-28 Litening II



**Unguided Bombs**  
**81** Mk-81  
**82** Mk-82  
**82HL** Mk-82 SE  
**82HL** Mk-82 AIR  
**83** Mk-83  
**20** Mk-20 Rockeye



**Rockets & Missiles**  
**10S** 4 x ZUNI  
**68S** 7 x 2.75" Hydra  
**20S** 7 x 2.75" APKWS  
**25S** 8 x SUU-25/LUU-2  
**LMAV** AGM-65E LMAV  
**LMV2** AGM-65E2/L LMAV  
**IRMV** AGM-65F IRMAV  
**SA** AGM-122 Sidewarm  
**9M** AIM-9M Sidewinder



**Precision Guided Munitions**  
**12** GBU-12 LGB  
**16** GBU-16 LGB  
**J82** GBU-38 JDAM  
**J83** GBU-32(V)2/B JDAM  
**J82L** GBU-54B LJDAM

**LANDING XWIND LIMITS**

App ≥ 140 kts 20 kts (15 kts night)  
App < 140 kts 15 kts (10 kts night)  
Gwt > 19,550 lbs 10 kts

**MAX WEIGHT**  
**CL:** 26,000 lbs  
**VL:** 20,500 lbs  
**RVL:** 24,500 lbs

**Wet runway:** reduce by 5 kts

TAKEOFF DATA						LANDING TYPES				
	VTO*	RVTO	STO	CTO	Nozzles	Flaps	AoA	Attitude		
1 Finger Checks	NRAS	-	-	VREST	Calc					
	PC	14°	14°	14°	82°	STOL	<15°	WH: 0°		
	STO Stop	Clear	70°	VREST	82°	STOL	<15°	WH: 0°		
	Trim**	0°,0°,2°ND	0°,0°,2°ND	0°,0°,2°ND	60°	STOL	10-12°	WH: +2°		
	Flaps	STOL	STOL	STOL***	60°	AUTO	10-12°	WH: +2°		
	Wrn/Caut	Out	Out	Out	40-60°	STOL	8-10°	WH: +2°		
2/5 Finger Checks	Noz 50° or STO: Flaps Check					AVNSL	8-10°	WH: +2°		
	Noz 10°: Engine ACCEL (2.4–3.1s), IGV 11–22° at 60%					HSSL	82° 10-12ft	STOL	10-12°	WH: +2°
	Water: As required, reset to 60%					BSSL	98° 2-3ft	STOL	10-12°	WH: +2°
	Noz 30°: Duct Pressure at 60% (45psi)					CL	0°	AUTO	10-12°	WH: +2°
Takeoff	Nozzles	82°	30°	10°	10°	PNB: 70% rpm at 98° noz to <60kt				
	NWS	-	Engage	Engage	Engage					
	Throttle	FULL	FULL	FULL	FULL					
	Brakes	Hold	Release	Release	Release					
	Noz Rot	-	RPM>110%	NRAS	-					
	Aft Stick	-	-	-	NRAS					
	Attitude	Accelerating Transition to PC			PC					
<p>*VTO Limit from VREST Page</p> <p>**Shore trim; LHA trim from Tote Board</p> <p>***AUTO permitted if FOD risk but VREST data invalid</p>										

VMC CLIMB		DDI	HUD	L-AMPCD	R-AMPCD	VFR DESCENT	
300 KCAS Full Power to M		Takeoff	VSTOL	EHSD-DCNTR	ENG (DAY) HUD / FLIR (NIGHT)	250 KCAS < 10,000 ft	
250 KCAS FP to < 10,000 ft		IMC	VSTOL	EHSD-DCNTR	AS REQ else HUD	Descent:	
		En-Route / RTF	NAV	EHSD-DCNTR	EW / FLIR	230 KCAS, AUTO flaps IDLE power	
		Holding	NAV	EHSD-DCNTR	AS REQ	Overhead Arrival:	
		Apprch / Landing	VSTOL	EHSD-CNTR	AS REQ	350 KCAS, 850 ft Level break	
		Target Area	A/G	EHSD-CNTR	DMT / FLIR		
<b>SCRAMBLE</b>							
1 CANOPY – <b>CLOSE</b>		5 DECS switch – <b>ON</b>		9 INS – <b>ALIGN</b>			
2 SEAT – <b>ARMED</b>		6 ENG ST – <b>ON</b>		10 INS – <b>IFA/NAV</b>			
3 BATT – <b>ON</b>		7 THROTTLE – <b>IDLE</b>		11 FLAPS – <b>ON</b>			
4 FUEL S/O – <b>ON</b>		8 W&C Its – <b>TEST</b>		12 P BRAKE – <b>OFF</b>			