

PREFLIGHT CHECKS

- If required, tell Chief to PLACE the WHEEL CHOCKS.

Left console:

- Circuit breakers.....CHECK
- Rudder trim knob.....CENTERED
- Radar mode selector.....OFF
- Throttles.....OFF
- Flap lever.....THUMB SW
- Flap thumb switch.....UP
- Speed brake switch.....NEUTRAL
- Nose strut switch.....RETRACT

Left vertical:

- Fuel shutoff switches - left and right.....GUARDS CLOSED
- Armament light control knob.....AS REQUIRED
- Landing gear alternate release handle.....FULLY STOWED
- Landing & taxi light switch.....OFF
- Missile volume control.....FULLY COUNTERCLOCKWISE
- Armament and jettison switches.....OFF and SAFE

Instrument panel:

- Landing gear lever.....LG DOWN
- Drag chute handle.....IN
- Flight instruments.....CHECK and SET
- Optical sight mode selector.....AS REQUIRED
- Aux intake doors indicator.....BARBER POLE

Pedestal:

- UHF radio and frequency.....AS REQUIRED
- TACAN.....AS REQUIRED
- NAV MODE switch.....AS REQUIRED
- Antenna switch.....AS REQUIRED
- Circuit breakers.....CHECK

PREFLIGHT CHECKS

Right vertical:

- Cockpit pressurization and temp. controls.....**AS REQUIRED**
- Anti-ice switch.....**OFF**
- External fuel transfer switches.....**OFF**
- Fuel boost pump switches.....**LEFT and RIGHT**
- Crossfeed switch.....**OFF**
- Auto balance switch.....**CENTERED**
- Canopy jettison T-handle.....**IN**
- Battery switch.....**BATT**
- Aux intake doors indicator.....**CLOSE**
- Generator switches.....**L GEN and R GEN**

Right console:

- Oxygen system.....**CHECK**
 - Supply pressure gage.....**65-110 PSI**
 - Quantity indicator.....**CHECK**
 - Supply lever.....**ON**
 - Diluter lever.....**NORMAL**
 - Emergency lever.....**NORMAL**
- IFF/SIF.....**STBY**
- Fuel and oxygen check switch.....**GAGE TEST and QTY CHECK**
- Compass switch.....**AS REQUIRED**
- Internal and external lights.....**AS REQUIRED**
- Rotating beacon.....**AS REQUIRED**
- Light warning test switch.....**TEST**
- Circuit breakers.....**CHECK**
- If required, tell **Chief** to turn **GROUND POWER ON**.

ENGINE STARTUP

- Radio **ATC** and **REQUEST START-UP**.
- Tell **Chief** to **CONNECT GROUND AIR Supply** unit.
- Tell **Chief** to **APPLY GROUND AIR** to motor left engine.
- When left engine RPM reaches 10 %
 - Left engine throttle.....**IDLE**
 - Left engine start.....**PUSH**
- Left engine should stabalize within 35 sec.....**CHECK**
 - RPM.....**49-52 %**
 - EGT.....**> 140 °C**
 - Nozzle position.....**70-80 %**
 - Fuel flow rate.....**~ 400 pph**
 - Oil pressure.....**5-20 psi**
 - Hydraulic pressure.....**2800-3200 psi**
 - Generator caustion light**OUT**
 - Auxiliary intake doors indicator.....**BARBER POLE**
- Tell **Chief** to **APPLY GROUND AIR** to motor right engine.
- When right engine RPM reaches 10 %
 - Reft engine throttle.....**IDLE**
 - Reft engine start.....**PUSH**
- Right engine should stabalize within 35 sec.....**CHECK**
- Auxiliary intake doors indicator.....**OPEN**
- Tell **Chief** to **DISCONNECT GROUND AIR Supply** unit.
- If required, tell **Chief** to turn **GROUND POWER OFF**.

CROSSBLEED START

- Tell Chief to DISCONNECT GROUND AIR Supply unit.
- If required, tell Chief to turn GROUND POWER OFF.
- Left engine RPM.....95 %
- Reft engine start button.....PUSH
- At 10 % engine RPM.....RIGHT THROTTLE IDLE
- Engine instruments.....CHECK
- After right engine at idle RPM.....LEFT THROTTLE IDLE
- Generator caution lights.....OUT
- Aux intake doors indicator.....OPEN

BEFORE TAXI

- Speed brakes.....RETRACT
- Flap thumb switch.....AUTO
- Flaps fully extended.....CHECK
- Damper switches.....YAW and PITCH
- Pitch damper cutoff switch.....CHECK
 - Pitch damper cutoff switch.....ACTUATE
 - Pitch damper switch.....MOVES TO OFF
- Pitch damper switch.....PITCH
- Flight controls.....CHECK
- Pitch trim to take-off configuration.....≥ 6
- Aileron trim.....CHECK and SET AS REQUIRED
- Altimeter pressure.....QFE
- Altimeter.....CHECK
 - Mode control lever.....PNEU
 - PNEU light.....ON
 - Mode control lever.....ELECT
 - PNEU light.....OFF
 - Pressure difference between modes.....< 75 ft
- Standby attitude indicator.....UNCAGE
- Primary and standby attitude indicator.....-3°
- Canopy lever.....CLOSE
- Pitot heat check.....ON then OFF
- Master caution light.....RESET
- Caution panel warning lights off.....CHECK
- Radar Warning Receiver.....POWER ON
- Radar mode selector (10 min before overheating).....STBY
- Taxi lights.....ON
- If required, tell Chief to REMOVE the WHEEL CHOCKS.

TAXI

- Radio **ATC** and **REQUEST** premission to **TAXI TO RUNWAY**.
- Nose wheel steering..... **ENGAGE**
- Throttle setting to get rolling..... **70 %**
- Taxi to runway at ~ 60 % engine RPM.

BEFORE TAKE-OFF

- Hold at runway line.
- Pitch trim take-off configuration..... **CHECK**
- Pitot heat..... **ON**
- Engine anti-ice..... **ON if T<4°C**
- Nose strut switch..... **EXTEND**
- Radio **ATC** and **REQUEST** permission for **TAKE-OFF**.

Weight [lbs]	Configuration	Pitch	Speed
15000	clean	6	145
15500-16000	ammo, missiles	7	155
17000-18000	ammo, missiles, central tank	8	166
19000	ammo, missiles, 3x tank 150	7	167
19000-21000	ammo, missiles. bombs, rockets, central tank	7	172
22000	ammo, missiles, 3x tank 275	7	179
23000	ammo, missiles, bombs, rockets	7	187

TAKE-OFF

- Roll to runway centerline.
- Breaks..... **HOLD**
- Throttle..... **MIL**
 - Temperature..... **665-675°C**
 - Nozzle position..... **0-16 %**
- NWS button depressed and held, release breaks.
- At 60 KIAS release NWS button.
- If required, throttle to full.
- Rotate at ~ 10 KIAS before liftoff speed.

AFTER TAKE-OFF

- Landing gear lever.....UP
- Pitch trim and flaps position.....AS REQUIRED
- Aux intake doors indicator.....CLOSE
- Climb speed.....> 300 KIAS
- Flap thumb switch.....AS REQUIRED
- Fuel management
 - External fuel tanks: transfer swtiches.....ON
 - No ext. fuel tanks: autobalance switch.....LEFT LOW
- At altitude above 8000 ft
 - Indicated oxygen consumption.....CHECK
 - Cockpit pressurization.....CHECK
 - Altimeter mode.....AS REQUIRED

BEFORE LANDING

- Radio **ATC** for **INBOUND**.
- Altimeter.....**QFE**
- Fuel balancing switch..... **CENTER**
- Crossfeed switch..... **OFF**
- Hydraulic pressure.....**2800–3200 PSI**
- Flap lever.....**THUMB SW**
- Flap thumb switch.....**AUTO**

LANDING

- Radio **ATC** and **REQUEST LANDING**.

Upwind leg:

- Enter traffic pattern at 300 KIAS.
- Descend to 1500 ft AGL 3 miles before end of runway.

Crosswind leg:

- Maintain 1500 ft AGL

Downwind leg:

- Landing gear lever (**<260 KIAS**).....**DOWN**
- Gear indicator lights.....**GREEN**
- Speed brake..... **AS REQUIRED**

Base leg:

- Decelerate to ~165 KIAS and keep altitude of 1500 ft.
- AOA indexer..... **ON SPEED**

Final approach:

- Decent rate ~1000 ft/min.
- Decrease speed to 145 KIAS.
- AOA indexer..... **ON SPEED**
- Approaching runway decrease vertical speed to 400 ft/min.
- Flare at ~20 ft and smoothly decrease speed to idle.
- Touchdown at 135 KIAS.
- Deploy drag chute and carefully apply wheel breaks.

AFTER LANDING

- Jettison drag chute.
- Cockpit pressurization switch.....RAM DUMP
- Flap thumb switch.....UP
- Speed brake.....OUT
- Radar mode selector.....OFF
- Optical sight mode selector.....OFF
- Pitot heat and engine anti-ice switches.....OFF

ENGINE SHUTDOWN

- Cockpit pressurization switch.....RAM DUMP
- Canopy.....OPEN
- Cockpit pressurization switch.....NORMAL/CABIN PRESS
- All unguarded switches (except batt, gen, boos pumps)....OFF
- Throttles.....OFF
- Standby attitude indicator.....CAGE and LOCK
- Generator switches.....OFF
- Boost pump switches.....OFF
- Battery switch.....OFF

AIR-TO-GROUND: GUN & ROCKETS

- Weapon switch.....**GUNS MSL & CAMR**
- Sight mode selector.....**MAN**
- Reticule depression knob.....**SET**
- Rocket employment:
 - External stores switch.....**RKT/DISP**
 - Pylons with LAU.....**ON**
- Climb to initial altitude (5000-6000 ft AGL).
- Adjust initial speed (350-370 knots).
- Set target up at 10 o'clock and roll-in when ready.
- Align sight pipper with target.
- Watch dive angle and speed.
- At release altitude
 - Guns: pull trigger to second detent
 - Rockets: press bomb-rocket release button.
- Perform 4G pullout within 2 seconds.

GUNS TABLE

Dive Angle	Initial		Release		Reticule Depression
	Altitude	Speed	Altitude	Speed	
20	5000	350-370	2000	400	12
30	6000	350-370	3000	400	8

ROCKETS TABLE

Dive Angle	Initial		Release		Reticule Depression	Rocket Type
	Alt	Speed	Alt	Speed		
20	5000	350-370	1500	400	14	HYDRA
					34	FFAR
30	6000	350	2000	400	10	HYDRA
					30	FFAR

AIR-TO-GRUND: BOMBS

- Weapon switch.....GUNS MSL & CAMR
- Sight mode selector.....MAN
- Reticule depression knob.....SET
- External stores switch.....BOMB or RIPL
- If riple release, INTERVAL switch.....AS REQUIRED
- Pylons with bombs loaded.....ON
- Climb to initial altitude (5000-6000 ft AGL).
- Adjust initial speed to 350 knots.
- Set target up at 10 o'clock and roll-in when ready.
- Align sight pipper with target.
- Watch dive angle and speed.
- At release altitude press bomb-rocket release button.
- Perform 4G pullout within 2 seconds.

BOMBS TABLE

Dive Angle	Initial		Release		Reticule Depression
	Altitude	Speed	Altitude	Speed	
20	5000	350	1500	380-400	80
30	6000	350	2000	440-450	79

AIR-TO-AIR: MISSILES

- Weapon switch.....GUNS MSL & CAMR
- Sight mode selector.....MSL
- Armament panel outer pylon switches.....UP
- Radar mode selector.....OPER
- Radar range selector - **MSL** or **DM**.....**40** or **10**
- Radar elevation antenna.....**AS REQUIRED**
- Align target to horizontal center of the radar display.
- **MSL** Mode
 - TDC on target icon and lock with ACQ button.
- **DM** Mode
 - 5 NM from target, DOGFIGHT/RESUME switch forward.
- When in range, LK ON light and IN RANGE light illuminate.
Red dot appears next to gunsight reticle.
- Press weapon release button to fire.
- Unlock target by DOGFIGHT/RESUME CENTER-PRESS.
- Abort by pressing the MISSILE UNCAGE switch.

AIR-TO-AIR: GUNS

- Weapon switch.....GUNS MSL & CAMR
- Sight mode selector.....**A/A1** or **A/A2**
- Radar mode selector.....OPER
- Radar range selector.....**10**
- Radar elevation antenna.....**AS REQUIRED**
- Align target to horizontal center of the radar display.
- 1 NM from target engage DG mode by DOGFIGHT/RESUME aft.
- When in range, LK ON light and IN RANGE light illuminate.
Red dot appears next to gunsight reticle.
- Press trigger to second detent to fire.