F-16 Ramp Start:

1. Close canopy and lock it (left side)
2. Main battery power switch all the way forward (behind throttle)
3. Fuel panel knob to NORM (left side)
4. Air source knob to normal (behind flight stick)
5. Jet Fuel Start Panel: Start 2 (right click)
6. At 25% engine RPM, click throttle lever
7. Avionics Panel: Every switch on except MAP. EGI knob to Align NORM
8. Go to right MFD and press DTE and load it.
9. FLCS panel: Reset and hit BIT switch to start test
10. IFF panel: NORM and UFC
11. EXT Lighting Panel: Master to NORM and turn on lights
12. ECM Panel: Switch to OPR
13. AUDIO Panel: Turn up volume for COM 1 and COM 2. Do the same for MSL, ILS, and Threat Warning
14. Backup UHF Panel: Set knob to BOTH
15. HMCS Panel: Full increase
16. Threat Warning Panel: Power on (left of HMCS panel)
17. CMS panel: Turn on everything except for jettison. Mode knob to MANUAL
18. RWR panel: RF to NORM
19. Electronic Warfare Panel: Click Handoff button
20. ICP panel: Turn on HUD with top left knob
21. Remove safety pin: T and then 1
22. Sensor Power panel (right side): LEFT HDPT, RIGHT HDPT, FCR, and RDR ALT to standby
23. Oxygen Regulator Panel: On
24. Verify BIT test is done
25. LEFT MFD Panel: TEST and CLR errors
26. Arm ejection seat
27. COM 1, 2, enter to talk to go to tower frequency. Go through menu with T and request QNH
28. Set altimeter to QNH value
29. Head Mounted Cueing System (HMCS) setup: LIST, 0, RCL, DOBBER to SEQ, and 0.
30. Line up helmet, cursor enable (Insert), Dobber to RTN
31. Turn EGI knob on avionics panel to NAV when INS on DED flashes RDY
32. Set MIDS (Multifunctional Information Distribution System) to on in the avionics panel and load Link16 on the DTE (Data Transfer Equipment) page
33. Taxi light on.

34. Remove chocks: T and 2.
35. Turn on nose wheel steering. Ready for taxi.

Taxi and Takeoff:

1. Contact Ground ATC (channel 2 on UHF) for taxi to departure.
2. Bring up INS (Inertial Navigation System) page on DED with ICP: List and 6.
3. Enter channel 3 (Tower) on ICP or select UHF with ICP Dobber Switch and change the channel with the ICP rocker switch.
4. Turn off NWS.
5. Cycle to steerpoint 2 using rocker switch.
6. Move throttle to 80% percent while holding down wheel brakes. Let go once ready.
7. Use afterburner once speed tape shows up.
8. Take off at 170 knots. Gear up immediately.
9. Enter channel 4 (Departure/Approach) on ICP or select UHF with ICP Dobber Switch and change the channel with the ICP rocker switch.
10. Report airborne.

Navigation:

1. Change steerpoint using ICP rocker switch.
2. Horizontal Situation Display (HSD) on right MFD to see flight route.
3. Option: Press 4 on ICP and change to auto by selecting SEQ on the data entry switch.
4. Press 5 (Cruise page) and then 0. Match speed caret with speed to make sure you reach each steerpoint on time.
5. Automatic steerpoint change with STPT (numpad 4) and ICP dobber to SEQ.

6. CRUS (numpad 5) to monitor system time, desired time on station, and ETA.

Landing:

1. When 30 miles out, contact approach/departure control and request unrestricted approach (Channel 4)
2. They will give you your runway and QNH
3. Around 15nm, departure will have you switch to Tower (Channel 3) and request landing
4. Once 10 miles out, get below 300 knots by reducing throttle and employing air brakes (b)
5. Landing gear down once below 300 knots
6. Lower plane to get -2.5 degrees pitch line to the start of the runway. Bring the flight path marker up to the -2.5 degrees pitch line once it is at the start of the runway.
7. Report on final once 5 miles out and switch DED to INS info to see ground speed
8. **The most important part of landing is to keep the FPM on top of the landing staple and on the -2.5 degrees pitch line. The ILS localizers don't matter if the above 3 are set. Throttle does not need to change if the FPM and landing staple are stable!**
9. **Once at 20 feet, cut throttle and pull back on the stick until you see the green marker on the AOA. Gently pull back and remain horizontal before touching down.**
10. Airbrake by keeping roll triangle on horizon marker
11. Let nose fall around 80 knots. Brake when all 3 wheels are down
12. Activate nosewheel steering once below 65 ground speed
13. Switch to ground control channel (2) and request taxi to ramp

ILS Night Landing:

1. Console lighting to max
2. ILS volume to max
3. DED set to T-ILS page (1 on ICP or numpad 1)
4. Set ILS frequency in T-ILS page
5. Enter approach course (CRS)
6. Turn on CMD STRG with 0 (if needed)
7. Set LOC course on Horizontal Situation Indicator (HSI)
8. Set minimum altitude with ALLOW (numpad 2)

9. Use localizers to keep aircraft lined up with runway
10. **<u>The most important part of landing is to keep the FPM on top of the landing staple and on the -2.5 degrees pitch line. The ILS localizers don't matter if the above 3 are set. Throttle does not need to change if the FPM and landing staple are stable!</u>**
11. **Once at 20 feet, cut throttle and pull back on the stick until you see the green marker on the AOA. Gently pull back and remain horizontal before touching down.**
12. Airbrake by keeping roll triangle on horizon marker
13. Let nose fall around 80 knots. Brake when all 3 wheels are down
14. Activate nosewheel steering once below 65 ground speed
15. Switch to ground control channel (2) and request taxi to ramp

Air Refueling:

1. Set UHF to channel 6 (AWACS)
2. Request vector to nearest tanker via AWACS (q)
3. Press T-ILS (numpad 1) and change TACAN channel to tanker's
4. Put DED display on HUD
5. Enable BNGO page (LIST, 2)
6. RF to Silent
7. Turn on aerial refueling lights
8. Set UHF to channel 13
9. Request refueling (y)
10. Open fuel door
11. Position to pre-contact point
12. Use the director lights on the tanker to position
13. Confirm contact and done refueling
14. Sun's Method:
    a. **<u>DO NOT USE PITCH ON FLIGHT STICK. USE PITCH TRIM IN EXTREMELY SMALL INCREMENTS.</u>**

b. Shift+3 for situation gauge
c. Set nose pitch up and down trim to End and Home. Set Delete to reset trim.
d. Set Throttle forward and back to Page up and Page Down
e. When adjusting pitch, press pitch up and down once and reset after half a second.
f. When adjusting speed, press throttle forward or back hotkey for 1 or 2 seconds and slowly inch forward.
g. In order to maintain speed and position, throttle up for 1 or 2 seconds and then throttle back down. Repeat.
h. Don't look at HUD. **Look at how the tanker is moving across your canopy. If it's moving away, throttle up for a few seconds. If it's moving below your canopy, nose down for a second.**
i. Reset FLCS and close refueling door if you want to stabilize with autopilot.

HARM: Set SAM codes in the Data Cartridge before mission

HAS mode -

1. A-G Master Mode
2. Master ARM on
3. Power on AGM-88
4. Select WPN and then HAS mode (OSB 1)
5. Select Threat Table (OSB 2)
6. SRCH to filter out threats if needed
7. Fly inside SAM threat ring
8. TMS right to lock radar signal

POS mode -

1. A-G Master Mode

2. Master ARM on
3. Power on AGM-88
4. Select WPN and then POS mode (OSB 1)
5. Select Threat Table on MFD
6. Select SAM type on MFD
7. TMS up on Pre-planned threat point (PPT) via HSD to set steerpoint
8. Enter SAM threat ring and fire when the radar emission appears in the RWR

HAD mode -

1. A-G Master Mode
2. Master ARM on
3. Power on AGM-88
4. HAD page on MFD
5. TMS Up Long to switch to EOM mode (WEZ change)
6. Lock on threat with TMS up
7. Beam threat and wait for PGM1
8. Fire once ASEC flashes on HUD

AMRAAM:

1. A-A Mode
2. Master Arm ON
3. Change FCR to TRACK WHILE SCANNING (TWS) mode
4. Lock target on FCR with TMS Up
5. Keep the steering dot inside the Allowable Steering Error circle
6. Fire once caret is in the RMAX 2 DLZ (Dynamic Launch Zone) and the cue inside the Target Designator box flashes
7. TMS Right to lock next target

AIM-9 Sidewinder:

1. A-A Mode
2. Master Arm ON
3. Select WPN on MFD
4. Lock target on FCR
5. Prep the seeker head by setting it to ‘COOL’ on the MFD
6. Uncage missile when caret reaches RMAX 2 and there is a growling tone
7. Weapon release upon solid heat tone

GPS Guided Bombs:

1. Prepare targets and set them to Steerpoint 99, 98, 97, …
2. Power on the munition in the SMS page
3. A-G mode should be set to PRE in the MFD
4. Master Arm to up position once near target area
5. Select target steerpoint #99
6. Set autopilot: STRG SEL (Steering Select) and ALT HOLD
7. Press Cursor Zero (CZ on left MFD)
8. Release bomb when caret reaches bottom of the bracket (when countdown hits 0)
   Change steerpoint and repeat
9. Some munitions like the JSOW will not fire if bank angle or speed are too high.

Bombing with TGP:

1. Power on the munition in the SMS page
2. A-G mode
3. Select TGP A-G on MFD
4. DMS Down to SOI TGP
5. MARK (numpad 7) on ICP
6. Set MARK to TGP and then TMS Up to populate MARK coordinates

Laser Guided Bombs:

1. Set laser codes for each aircraft (1511-1788)
2. Go to LASER on DED (LIST, 0, 5)
3. Set TGP Code to the laser code you set
4. Set LST Code to another aircraft's laser code if they are lasering for you
5. Set A-G to CMBT with '0/SELECT' on the ICP (combat)
6. Set Laser ST Time to '12' seconds (depending on munition)
7. A-G Mode on
8. Select laser guided bombs on the SMS page
9. Select CCRP release mode
10. Set Release Pulse (RP) to '1'
11. Select TGP on the left MFD and turn it on (OSB STBY, A-G)
12. Use WIDE to change FOV (as needed)
13. Use CZ to reset radar cursor (as needed)
14. Laser ARM on
15. OSB Menu to set FRAG radius (optional)
16. TMS Up on target in TGP with Point Track
17. Put FPM on azimuth steering line and wait range bracket countdown to finish
18. 'L' on MFD will flash if laser is firing
19. Weapon release and confirm kill on TGP (keep target on the right side of the F-16)

Mavericks:

1. A-G mode
2. Power on Mavericks
3. Switch left MFD to WPN page and right MFD to TGP page
4. Once Mavericks are on (takes 3 minutes), use TGP to setup BORESIGHT on mavericks
5. Master Arm ON
6. Lock a target on TGP
7. Switch to left MFD and lock on same target as TGP and press BORESIGHT on WPN page
8. Missile Step Switch (Nosewheel Steering) to switch stations and repeat step #6
9. Enter dogfight mode and then return to A-G mode
10. Test to make sure WPN page is slaved to TGP

11. Wait to get within 10 nm of target @ 20,000ft. Do not go below 15,000ft!
12. Switch to WPN page and lock target with Maverick (NOT TGP)
13. Dip nose towards target
14. Once large crosshair begins to twitch and the small crosshair stops blinking, pickle Maverick
15. No need to unlock Maverick lock or touch the TGP, just find a new target with next Maverick and repeat
16. TMS Aft on maverick to reset maverick lock to TGP

Start off at 25k ft level flight, get your tgp on the target, when you're about 15nm from target throttle to idle and point nose down to point at target (shallow angle of attack)... Get in range, lock onto targets, fire. DO NOT DROP BELOW 17k ft. If you see that you're about to go low just abort run, turn around, 20nm plus miles out and turn around for another pass. Also don't fly over the targets as in a real mission you never know what else could be defending them.