Cessna 750 Citation X

Simplified Operating Notes

Flight Simulation Use Only

Release 1 - February 2024

EXPLANATORY NOTES

These procedure notes aim to provide the sim pilot with clear and straightforward procedures inspired by real world operations.

Procedures with numbered items should be performed as “Read and Do”. Perform each action individually. Procedures without numbers should be read in their entirety before commencing the procedure. Both methods may be combined in a single procedure.

Checklists may be performed as a memory flow then checked using the checklist. In real flight operations not every memory flow item is then represented in the checklist, items of low consequence may only be contained in the procedure. However for simplicity in this document Checklists are comprehensive and may be used in the same “read and do” style as a numbered procedure.

For multiple flights in one session, the **Cockpit Preparation Procedure** may be commenced after the **Parking Checklist** has been completed. In this case it may be necessary to execute the steps from the **Power Up Procedure** to start up the APU and provide bleed air.

If the **Power Down Procedure** has been completed then it is essential that the procedures are re-commenced from **Power Up Procedure**.

Limited Emergency / Abnormal Notes are provided in a dashed boxes

1. PLANNING INFORMATION

Maximum Takeoff Weight	16510 kg	36400 lbs
Maximum Landing Weight	14420 kg	31800 lbs
Maximum Zero Fuel Weight	11060 kg	24400 lbs
Basic Empty Weight	9810 kg	21625 lbs

Maximum Operating Altitude	FL510
Demonstrated Crosswind Component	10 kts

2. POWER UP PROCEDURE

SWITCH PANELS

1	PASS OXY	AUTO
2	EMERG LT	ARMED
3	FUEL CROSSFEED	OFF
4	GRVTY XFLOW	OFF
5	CTR WING XFR	OFF
6	LH and RH GEN	GEN
7	LH and RH FUEL BOOST	NORM
8	LH and RH IGNITION	NORM
9	LH and RH FADEC	NORM
10	STBY PWR	ON, RED LIGHT CHECKED
11	A AUX PUMP	OFF
12	PUMP A and B UNLOAD	NORM
13	ANTISKID	NORM
14	External Lights	AS REQUIRED
15	Pressurization Switches	AS REQUIRED
16	BATT 1 and BATT 2	ON

CONTINUES ...

APU SYSTEM		
17	APU MASTER	ON
18	APU TEST	PERFORM
19	APU	START
20	APU RPM	WAIT FOR 100%
21	APU GENERATOR	ON
22	APU BLEED AIR	ON

SWITCH PANELS		
23	ISOL VALVE	OPEN
24	CKPT and CAB PAC	ON
25	AVIONICS POWER	ON
26	EICAS POWER	ON

FMS		
27	NAV DATABASE CYCLE	CHECK
28	POS INIT	PERFORM

PEDESTAL		
29	WARNING SYSTEMS TEST	PERFORM
30	THROTTLE LEVERS	CUT OFF
31	ELEV, AIL, RUD TRIM	-6.0, NEUTRAL, NEUTRAL

END OF PROCEDURE

3. COCKPIT PREPARATION PROCEDURE

FMS

1	FLT PLN	ENTER

Enter DEST into right LSK before entering rest of plan.

Ensure DEST from **right LSK** is **transferred via scratchpad** to **left LSK** at end of ACTIVE FLIGHT PLAN.

DO NOT ENTER DEST INTO FLT PLN WITH KEYPAD

2	FLT PLN	ACTIVATE
3	PERF INIT pages	COMPLETE
4	PERFORMANCE INIT 5/5	CONFIRM INIT
5	PERF DATA pages	VERIFY
6	TAKEOFF INIT pages	COMPLETE
7	TAKEOFF INIT 4/4	CONFIRM INIT
8	TAKEOFF DATA 2/2, V SPEEDS	VERIFY

PFD

9	V SPEEDS	VERIFY
10	HSI SOURCE	AS REQUIRED
11	HSI AHRS SLAVING	HEADING CHECKED (x2)
12	INITIAL ALTITUDE SELECTION	SET/VERIFIED
13	INITIAL HEADING	SET/VERIFIED
14	TO/GA BUTTON	PRESS
15	FLIGHT MODE ANNUNCIATORS	ROL, TO
16	LNAV MODE	ENGAGE AS REQUIRED
16	YD and MTRIM	ENGAGE

CONTINUES ...

… COCKPIT PREPARATION PROCEDURE CONTINUED

PRESSURIZATION		
17	PLANNED CRUISE ALTITUDE	SELECT

RADIOS		
18	ATC/TCAS	CODE ENTERED
19	NAV and ADF frequencies	AS REQUIRED

..WHEN REFUELLING COMPLETE..

SWITCH PANELS		
20	CTR WING XFR	NORM

END OF PROCEDURE

4. BEFORE START CHECKLIST

1	External Doors	CLOSED
2	Parking Brake	ON
3	GND REC lights	ON
4	SEAT BELT LTS	ON
5	ATC / TCAS	ATC ALT
6	FUEL BOOST	LH and RH NORM
7	IGNITION	LH and RH NORM
8	FADEC	LH and RH NORM
9	CTR WING XFER	LH and RH NORM
10	CROSSFEED	OFF
11	GRAVITY XFLOW	OFF

END OF CHECKLIST

5. ENGINE START PROCEDURE

1 START PRESS (EICAS ENG) ——— MORE THAN 30 PSI

2 ISOL VALVE ——— CLOSED

START RIGHT ENGINE

3 ENGINE START RH ——— PRESS, CONFIRM LIGHT

4 THROTTLE ——— IDLE, BEFORE 10% N2(TURB%)

5 N1 (FAN%) ——— CONFIRM INCREASE

6 OIL PRESSURE ——— CHECK GREEN BAND

7 ITT ——— MONITOR

8 START LIGHTS ——— OUT BY 57% N2 (TURB%)

9 HYDRAULIC PRESSURE ——— VERIFY

START LEFT ENGINE

10 ENGINE START LH ——— PRESS, CONFIRM LIGHT

11 THROTTLE ——— IDLE, BEFORE 10% N2(TURB%)

12 N1 (FAN%) ——— CONFIRM INCREASE

13 OIL PRESSURE ——— CHECK GREEN BAND

14 ITT ——— MONITOR

15 START LIGHTS ——— OUT BY 57% N2 (TURB%)

16 HYDRAULIC PRESSURE ——— VERIFY

END OF PROCEDURE

6. AFTER START PROCEDURE

1 DC AMPS/VOLTS ——— CHECK

2 APU BLEED AIR ——— OFF

3 L ENG BLD AIR ——— HP/LP

4 R ENG BLD AIR ——— OFF

5 START PRESS (EICAS ENG) ——— MONITOR, CHECK 0

6 ISOL VALVE ——— OPEN

7 START PRESS (EICAS ENG) ——— MONITOR, CHECK NORMAL

8 R ENG BLD AIR ——— HP/LP

9 ISOL VALVE ——— CLOSED

APU IS RECOMMENDED WITH BLEED AND GENERATOR DURING TAKEOFF

10 APU BLEED AIR ——— OFF IF NOT REQUIRED

11 APU ——— STOP IF NOT REQUIRED

12 APU MASTER ——— OFF IF NOT REQUIRED

13 FLAPS/SLATS ——— SET FOR TAKEOFF

14 TRIMS ——— SET FOR TAKEOFF

15 SPEEDBRAKES ——— CHECK OPERATION, STOWED

16 FLIGHT CONTROLS ——— CHECK

17 AHRS ——— CHECK ATTITUDE AND HEADING

18 EICAS ——— CHECK

19 PRESSURISATION—— CHECK CABIN AT DEPARTURE ELEVATION

20 SEAT BELT LIGHTS ——— PASS SAFETY

END OF PROCEDURE

7. TAXI PROCEDURE

1 TAXI LIGHT ——— ON

2 TOE BRAKES ——— HOLD

3 PARKING BRAKE ——— RELEASE

4 BRAKES ——— CHECK

5 STEERING ——— CHECK

THRUST REVERSER CHECK

6 THRUST REVERSERS ——— DEPLOY

7 TR LIGHTS ——— CHECK ARM, UNLOCK, DEPLOY ILLUMINATE

8 TR STOW SWITCHES ——— STOW EMER

9 TR LIGHTS ——— CHECK UNLOCK, DEPLOY EXTINGUISH

10 TR STOW SWITCHES ——— NORM

11 TR LIGHTS ——— CHECK ALL EXTINGUISH

12 ANTI-ICE ——— AS REQUIRED

13 TR LIGHTS ——— CHECK UNLOCK, DEPLOY EXTINGUISH

14 TR STOW SWITCHES ——— NORM

15 TR LIGHTS ——— CHECK ALL EXTINGUISH

16 ANTI-ICE ——— AS REQUIRED

17 PITOT/STATIC ——— LH and RH ON

END OF PROCEDURE

8. BEFORE TAKEOFF CHECKLIST

1	FLAPS / SLATS	SET FOR TAKEOFF
2	TRIMS	SET FOR TAKEOFF
3	SPEEDBRAKES	STOWED
4	FLIGHT CONTROLS	CHECKED
5	THRUST REVERSER LIGHTS	ALL OFF
6	PITOT/STATIC	LH and RH ON
7	EICAS	CHECKED
8	GND REC LIGHTS	ANTI-COL
9	LANDING LIGHT	LH and RH ON

END OF CHECKLIST

9. TAKEOFF PROCEDURE

- Position ailerons for wind correction
- Throttles to TO/MC Detent and check EICAS green TO indication
- Verify FAN% reaches target
- Release Brakes
- Vr : Rotate to Flight Director Command Bars (TO Mode)
- Positive Rate of Climb : Gear Up
- Above 400ft AAL : Verify or Engage Flight Director roll mode
- Above 400ft AAL and above 170 KIAS : Flaps Up
- Throttles to CLB thrust
- Continue acceleration to 210 KIAS minimum (Normal Min Clean)

If manoeuvring is required during acceleration, limit bank angle to 15 degrees until speed exceeds V2+15.

In the event of an engine failure maintain V2 minimum using FLC pitch mode for guidance. Level off at acceleration altitude then at V2+15 retract flaps to 5. If diversion is required select flaps up and accelerate to Venr 190 KIAS. Note Slats will remain extended if required even with Flaps selected up.

END OF PROCEDURE

10. AFTER TAKEOFF CHECKLIST

1	LANDING GEAR	UP
2	FLAPS / SLATS	UP
3	THROTTLES	CLIMB
4	ANTI-ICE	AS REQUIRED
5	PRESSURISATION	CHECKED
6	TAXI and LANDING LIGHTS	OFF
7	ENG SYNC	AS REQUIRED

BEFORE FL310 (IF APU ON FOR TAKEOFF)

8	APU BLEED AIR	OFF
9	APU	STOP
10	APU MASTER	OFF
11	PRESSURISATION	CHECKED

END OF CHECKLIST

11. DESCENT CHECKLIST

1 PRESSURISATION ——— LANDING ELEVATION

2 FUEL CROSSFEED ——— OFF

3 FUEL STATE ——— CHECKED

4 LANDING DATA ——— CHECKED

5 MINIMUMS ——— SET

BELOW FL310 AND LESS THAN 300 KTS (IF REQUIRED)

6 APU MASTER ——— ON

7 APU GENERATOR ——— CHECK ON

8 APU BLEED AIR ——— ON

9 SEAT BELT LIGHTS ——— PASS SAFETY

END OF CHECKLIST

12. APPROACH CHECKLIST

1 LEFT and RIGHT THRUST REVERSER ——— NORM

2 SEAT BELT LTS ——— ON

3 LANDING LIGHT ——— LH and RH ON

4 ENG SYNC ——— OFF

END OF CHECKLIST

Icing conditions : minimum speed 200 kts without slats extended

Recommended Minimum Manouvering Speeds - Max 30 Degree AoB

Clean	210
Slats	190
Flaps 5	170
Flaps 15	150
Flaps 35	Vapp + 5 / Vref + 10

13. LANDING CHECKLIST

- At 170 KIAS Select Flaps 15
- Slow to Vref + 15
- Gear Down
- Select Flaps 35
- Speed : Vapp / Vref+5

1 LANDING GEAR ——————————— DOWN, 3 GREENS

2 FLAPS ——————————————————— 35 (15)

3 SPEED BRAKES ——————————————— RETRACTED

4 EICAS ——————————————————— CHECKED

5 MISSED APPROACH ALTITUDE ———————— x000FT, CHECKED

END OF CHECKLIST

14. GO-AROUND PROCEDURE

- Press TO/GA Button
- Throttles to TO/MCT Detent and check EICAS green TO indication
- Pitch Target 10 Degrees or FD Pitch Command
- Flaps 15 (Or Flaps 5 if Flap 15 Landing)
- Positive Rate of Climb : Gear Up
- Above 400ft AAL : Verify or Engage Flight Director roll mode
- Above 400ft AAL and above 170 KIAS : Flaps Up
- Throttles to CLB thrust
- Continue acceleration to 210 KIAS minimum (Normal Min Clean)

If manoeuvring is required during acceleration, limit bank angle to 15 degrees until speed exceeds Vapp+15.

In the event of an engine failure maintain Vapp+15 minimum using FLC pitch mode for guidance. Level off at acceleration altitude then retract flaps to 5. If diversion is required select flaps up and accelerate to Venr 190 KIAS. Note Slats will remain extended if required even with Flaps selected up.

END OF PROCEDURE

15. AFTER LANDING PROCEDURE

1 THRUST REVERSERS ——— STOW

2 SPEEDBRAKES ——— RETRACTED

3 FLAPS ——— UP

4 PITOT/STATIC ——— LH and RH off

5 ANTI-ICE ——— AS REQUIRED

6 TAXI LIGHT ——— ON

7 LANDING LIGHT ——— LH and RH OFF

8 ANTI-COL lights ——— GND REC

IF APU NOT USED FOR APPROACH

9 APU MASTER ——— ON

10 APU GENERATOR ——— CHECK ON

11 APU BLEED AIR ——— ON

END OF PROCEDURE

16. PARKING

1 PARKING BRAKE ——— SET

2 TAXI and LANDING LIGHTS ——— OFF

3 ANTI-ICE ——— OFF

4 L and R ENG BLD AIR ——— OFF

5 THROTTLES ——— CUT OFF

WHEN ENGINE FAN <10%

6 GND REC lights ——— OFF

7 SEAT BELT LTS ——— OFF

8 ATC / TCAS ——— STBY

9 CTR WING XFER ——— LH and RH OFF

10 CROSSFEED ——— OFF

11 External Doors ——— CLEARED TO OPEN

END OF PROCEDURE

17. POWER DOWN

1	CKPT and CAB PAC	OFF
2	ISOL VALVE	CLOSED
3	APU BLEED AIR	OFF
4	APU GENERATOR	OFF
5	APU	STOP
6	APU MASTER	OFF
7	LH and RH FUEL BOOST	OFF
8	LH and RH IGNITION	OFF
9	External Lights	OFF
10	EMERG LT	OFF
11	PASS OXY	OFF
12	EICAS POWER	OFF
13	AVIONICS POWER	OFF
14	STBY POWER	OFF
15	CTR WING XFER	LH and RH OFF

END OF PROCEDURE

Credits

Pilsner, Hot Start Community Discord

Procedure proofreading and editing.

Graeme, Reflected Reality Simulations

Procedure concept, authoring, and testing.

(youtube.com/c/ReflectedRealitySimulations)

Various members of Hot Start Community Discord, especially

Amy, Camaïeu, Tom.

Playtesting and feedback.