

CPT

OPERATIONS MANUAL

Part 4

APPENDIX C

ABC AIRLINE

B737-300


COCKPIT PROCEDURES TRAINING (CPT)



✦ **Note: EXAMPLE / TEMPLATE FOR CPT**

This Document Is Intended For Use In Conjunction With:

- *Advisory Circular CA AOC-AC-FO-019: "Training Program Approval Process" - Technical Guidance Material For Operators and*
- *TGM CA AOC-FO-005: "Training Program Approval Process" - for Flight Operations Inspectors*

	<p align="center">Training Manual</p>	<p align="center">APPENDIX C ORIG.00 5MAY07</p>
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CPT

TABLE OF CONTENTS

APPENDIX C

B737-300

CPT

<u>SUBJECT</u>	<u>PAGE</u>
B-737 CPT TRAINING - PILOTS.....	3

CPT

CPT

I. OBJECTIVE:

The crewmember will acquire the skills and knowledge necessary to accomplish the maneuvers, procedures, and duties pertinent to his crew position. At the completion of CPT TRAINING, the flight crewmember will be prepared to enter INITIAL / TRANSITION / UPGRADE FLIGHT TRAINING.

II. COURSEWARE:

- 0 Cockpit Procedures Trainer.

III. MANEUVERS AND PROCEDURES DOCUMENTS:

- 1 ABC Airlines (SA CAA) B-737 Aircraft Operating Manual

CPT TRAINING MODULES ARE DEFINED AS FOLLOWS:

MODULES	HOURS
CPT SYLLABUS	24:00
CPT Period 1 Familiarization, Normal and Non-Normal Procedures	4:00
CPT Period 2 Normal and Non-Normal Procedures	4:00
CPT Period 3 Normal, Non-Normal and Emergency Procedures	4:00
CPT Period 4 Normal, Non-Normal and Emergency Procedures	4:00
CPT Period 5 Normal, FMS Procedures	4:00
CPT Period 6 FMS and Review/Proficiency (as required)	4:00
TOTAL INITIAL CPT TRAINING SEGMENT	24:00

NOTES:

1. *Systems procedures, including normal, abnormal, and emergency procedures, should be covered to the extent practical in the CPT. Since it is not always possible to program situations in the CPT, a verbal discussion of the particular area is required where appropriate.*
2. *Use of the appropriate Checklists and the B-737 Aircraft Operating Manual (AOM) is necessary throughout CPT training.*



CPT

PERIOD 1

4:00 HOURS

BRIEFING ITEMS:CPT Familiarization.

1. Review of Cockpit Controls and switch, Annunciators, lights or other Caution and warning systems.
2. Thrust Settings for Takeoff.
3. Introduce Flight Management System.
4. Cockpit Preparation and Before Starting Engines Checklist Amplified.
5. Crew Briefings (Takeoff - Approach).
6. Preview Period 1 Flight Profile.
- 7.

TRAINING SYLLABUS:

PREFLIGHT DUTIES

- Cockpit Preparation/Set-Up Flow
- Cockpit Safety Checks
- Checklist Callouts and Responses
- Checklist Sequence
- **Preflight/Start** Checklist

ENGINE STARTING (NORMAL AND NON-NORMAL)

- **Before Takeoff** Checklist

PUSHBACK/TAXIING PROCEDURES

- **Taxi** Checklist
- **Takeoff** Checklist

TAKEOFF AND INITIAL CLIMB

- Pilot Flying/Pilot Not Flying Callouts and Duties
- **Descent/Approach** Checklist

LANDING

- Pilot Flying/Pilot Not Flying Callouts and Duties
- **Landing** Checklist

WHEN OFF ACTIVE RUNWAY

- **After Landing** Checklist
- **Shutdown/Secure** Checklist

DEBRIEFING:

- Review of Period 1.
Preview of Period 2.



Training Manual

APPENDIX C
ORIG.00
5MAY07

CPT

PERIOD 2

4:00 HOURS

BRIEFING ITEMS:

1. Review of Normal, Non-Normal Amplified Checklists and EFIS.
2. Performance Limitations (Meteorological, weight and MEL/CDL)
3. Discussion of Flight Profiles and FMS/CDU settings.
4. Discussion of Aircraft Performance, required fuel loads, weather planning.
5. Cockpit Preparation and Before Starting Engines Checklist Amplified.
6. Crew Briefings (Takeoff - Approach).
7. Preview Period 2 Flight Profile – (to include lower than standard take-off minimums and take-off alternate requirements).
8. Non-Normal Operating Procedures

TRAINING SYLLABUS:

PREFLIGHT DUTIES

- Cockpit Set-Up Flow
- IRS position entry
- FMC/CDU Preflight
- **Preflight/Before Start** Checklist

ENGINE STARTING (NORMAL AND NON-NORMAL)

- **Before Takeoff** Checklist

PUSHBACK/TAXIING PROCEDURES

- **Before Takeoff/ Down to the Line** Checklist
- **Before Takeoff /Below the line** Checklist

TAKEOFF AND INITIAL CLIMB

- Normal Takeoff and Area Departure (including autopilot/flight director use)
- Pilot Flying/Pilot Not Flying Callouts and Duties
- **After Takeoff** Checklist

NON-NORMAL OPERATING PROCEDURES

- Generator Bus Failure
- All Generators Inoperative
- Generator Problems
- In-flight Reverse Thrust Light

CPT

- Hydraulic Fluid Loss
- Hydraulic Pump Overheat
- B Hydraulic System Failure
- A & STBY Systems Failure
- Dual Hydraulic Failure - Manual Reversion

DESCENT AND APPROACH PROCEDURES

- Pilot Flying/Pilot Not Flying Callouts and Duties
- **Descent/Approach** Checklist

LANDING

- Pilot Flying/Pilot Not Flying Callouts and Duties
- **Landing** Checklist

WHEN OFF ACTIVE RUNWAY

1. **After Landing** Checklist

BLOCKS

2. **Shutdown/Secure** Checklist

DEBRIEFING:

Review of Period 2.
Preview of Period 3.

PERIOD 3

4:00 HOURS

BRIEFING ITEMS:

1. Review of Normal, integrate FMS, and Non-Normal Amplified Checklists.
2. Performance Problem Review.
3. Weather Radar and other CRT displays, VNAV, LNAV.
4. Discussion of Flight Profiles.
5. Discussion of Aircraft Performance.
6. Cockpit Preparation and Before Starting Engines Checklist Amplified.
7. Preview Period 3 Flight Profile.

TRAINING SYLLABUS:

PREFLIGHT DUTIES

- Cockpit Set-Up Flow

CPT

- **Preflight/Before Start Checklist**

ENGINE STARTING

- Hot Start, Hung Start, No EGT Rise
- **Before Takeoff Checklist**

PUSHBACK/TAXIING PROCEDURES

- APU INOP
- Anti-Skid Light On
- **Takeoff Checklist**

TAKEOFF AND INITIAL CLIMB

- Normal Takeoff and Area Departure (including autopilot/flight director use)
- Landing Gear Will Not Move To Up Position
- Wheel Well Fire
- **After Takeoff Checklist**

NON-NORMAL OPERATING PROCEDURES (Icing Conditions)

- Engine Anti-Ice valve malfunction.
- Generator Inoperative
- Engine High Oil Pressure
- **Engine Failure Checklist**
- **Engine Inflight Start Checklist**
- Instrument Flags and Crossovers

-
- - HSI Nav Flag
 - HSI Glideslope Flag
 - HSI Heading Flag with RMI Flag
 - Yaw Damper inop
 - Passenger Cabin Fire
 - **Cargo Fire Checklist**
 - Window Overheat Light On
 - Single Hydraulic System Failure

DESCENT AND APPROACH PROCEDURES

- Area Arrival and ILS Approach
- Pilot Flying/Pilot Not Flying Callouts and Duties
- **Descent/Approach Checklist**

CPT

LANDING

3. Pilot Flying/Pilot Not Flying Callouts and Duties

4. **Landing** Checklist

WHEN OFF ACTIVE RUNWAY

5. **After Landing** Checklist

BLOCKS

6. **Shutdown/Secure** Checklist

DEBRIEFING:

Review of Period 3.

Preview of Period 4.

PERIOD 4

4:00 HOURS

BRIEFING ITEMS:

1. Review of Non-Normal and Emergency Checklists.
2. Performance Problems and system management task.
3. Discussion of Navigation Systems (FMS/CDU & IRS).
4. Discussion of Aircraft Performance.
5. Preview Period 4 Flight Profile.

TRAINING SYLLABUS:

PREFLIGHT DUTIES

7. Cockpit Set-Up Flow

8. **Preflight/Before Start** Checklist

ENGINE STARTING

9. Hot Start, Hung Start, No EGT Rise

10. N₁ or N₂ Inop

11. **Before Takeoff** Checklist

PUSHBACK/TAXIING PROCEDURES

12. Battery Start

13. Anti-Skid Light On

14. **Before Take-off** Checklist

TAKEOFF AND INITIAL CLIMB

15. Normal Takeoff and Area Departure (icing conditions) (including autopilot/flight director use)

CPT

- 16. **After Takeoff Checklist**
- 17. **NON-NORMAL OPERATING PROCEDURES** (Icing Conditions)
- 18. Pitot Heat inoperative.
- 19. Yaw Damper INOP Light On
- 20. Instrument Flags and Crossovers
- 21. EADI Failure Flags and Annunciators.
- 22. EHSI Failure Flags and Annunciators.
- 23. IRS Malfunctions, Nav Flags, RDMI Flags.
- 24. Engine Fire
- 25. **Engine Fire Checklist**
- 26. Dual Hydraulic System Failure (Manual Reversion)
- DESCENT AND APPROACH PROCEDURES**
- 27. Area Arrival and ILS Approach
- 28. Pilot Flying/Pilot Not Flying Callouts and Duties
- 29. **Descent/Approach Checklist**
- LANDING**
- 30. Pilot Flying/Pilot Not Flying Callouts and Duties
- 31. **Landing Checklist**
- WHEN OFF ACTIVE RUNWAY**
- 32. **After Landing Checklist**
- BLOCKS**
- 33. **Shutdown/Secure Checklist**
- DEBRIEFING:**
- Review of Period 4.
- Preview of Period 5.
- PERIOD 5**

4:00 HOURS

BRIEFING ITEMS:

- 1. Normal, Non-Normal and Emergency Checklists.
- 2. Review all Memory Items.
- 3. Review of Aircraft Systems.
- 4. Review Performance and Limitations.
- 5. Auto-flight – Autopilot, autothrotle and flight director system.
- 6. Review of Exterior Pre-Flight Check.

CPT

TRAINING SYLLABUS:

PREFLIGHT DUTIES

- 34. Cockpit Set-Up Flow
- 35. **Preflight/Before Start** Checklist

ENGINE STARTING

- 36. Hot Start, Hung Start, No EGT Rise
- 37. **Before Takeoff** Checklist

PUSHBACK/TAXIING PROCEDURES

- 38. Taxi Checklist
- 39. Accumulator Low Pressure
- 40. **Before Take-off** Checklist

TAKEOFF AND INITIAL CLIMB

- 41. Normal Takeoff and Area Departure (icing conditions, including autopilot/flight director use)
- 42. **After Takeoff** Checklist

NON-NORMAL OPERATING PROCEDURES (Icing Conditions)

- 43. Engine Anti-Ice valve malfunction
- 44. Instrument Failures
- 45. IRS Failures
- 46. RDMI and EHSI Flags
- 47. FD Failure
- 48. Nav Flag During VOR Tracking
- 49. Engine Fire
- 50. Engine Fire Checklist
- 51. Dual Hydraulic System Failure

NON-NORMAL and EMERGENCY PROCEDURES

- 52. Engine Fire
- 53. Wheel Well Fire
- 54. Cabin Smoke or Fire
- 55. Emergency Descent
- 56. Electrical Smoke or Fire
- 57. Loss of Thrust on Both Engines
- 58. In-flight Engine Start
- 59. Wing Anti-Ice Malfunctions

CPT

60. Air Conditioning Smoke

DESCENT AND APPROACH PROCEDURES

61. Area Arrival and ILS Approach

62. Pilot Flying/Pilot Not Flying Callouts and Duties

63. **Descent/Approach** Checklist

EMERGENCY LANDING

64. Landing Gear Disagreement

65. Pilot Flying/Pilot Not Flying Callouts and Duties

66. Gear Disagreement Procedure

EVACUATION

67. **Passenger Evacuation** Checklist

DEBRIEFING:

Review of Period 5.

Preview of Period 6 and CAA check.

PERIOD 4

4:00 HOURS

BRIEFING ITEMS:

6. Review of Non-Normal and Emergency Checklists.
7. Performance Problems and system management task.
8. Discussion of Navigation Systems (FMS/CDU & IRS).
9. Discussion of Aircraft Performance.
10. Preview Period 4 Flight Profile.

TRAINING SYLLABUS:

PREFLIGHT DUTIES

- Cockpit Set-Up Flow
- **Preflight/Before Start** Checklist

ENGINE STARTING

- Hot Start, Hung Start, No EGT Rise
- N₁ or N₂ Inop
- **Before Takeoff** Checklist

CPT

PUSHBACK/TAXIING PROCEDURES

- Battery Start
- Anti-Skid Light On
- **Before Take-off** Checklist

TAKEOFF AND INITIAL CLIMB

- Normal Takeoff and Area Departure (icing conditions) (including auto-pilot/flight director use)
- **After Takeoff** Checklist

NON-NORMAL OPERATING PROCEDURES (Icing Conditions)

- Pitot Heat inoperative.
- Yaw Damper INOP Light On
- Instrument Flags and Crossovers
- EADI Failure Flags and Annunciators.
- EHSI Failure Flags and Annunciators.
- IRS Malfunctions, Nav Flags, RDMI Flags.
- Engine Fire
- **Engine Fire** Checklist
- Dual Hydraulic System Failure (Manual Reversion)

DESCENT AND APPROACH PROCEDURES

- Area Arrival and ILS Approach
- Pilot Flying/Pilot Not Flying Callouts and Duties
- **Descent/Approach** Checklist

LANDING

- Pilot Flying/Pilot Not Flying Callouts and Duties
- **Landing** Checklist

WHEN OFF ACTIVE RUNWAY

- **After Landing** Checklist

BLOCKS

- **Shutdown/Secure** Checklist

DEBRIEFING:

Review of Period 4.

Preview of Period 5.

CPT

PERIOD 5

4:00 HOURS

BRIEFING ITEMS:

7. Normal, Non-Normal and Emergency Checklists.
8. Review all Memory Items.
9. Review of Aircraft Systems.
10. Review Performance and Limitations.
11. Auto-flight – Autopilot, autothrottle and flight director system.
12. Review of Exterior Pre-Flight Check.

TRAINING SYLLABUS:

PREFLIGHT DUTIES

- Cockpit Set-Up Flow
- **Preflight/Before Start** Checklist

ENGINE STARTING

- Hot Start, Hung Start, No EGT Rise
- **Before Takeoff** Checklist

PUSHBACK/TAXIING PROCEDURES

- Taxi Checklist
- Accumulator Low Pressure
- **Before Take-off** Checklist

TAKEOFF AND INITIAL CLIMB

- Normal Takeoff and Area Departure (icing conditions, including auto-pilot/flight director use)
- **After Takeoff** Checklist

NON-NORMAL OPERATING PROCEDURES (Icing Conditions)

- Engine Anti-Ice valve malfunction
- Instrument Failures
- IRS Failures
- RDMI and EHSI Flags
- FD Failure
- Nav Flag During VOR Tracking
- Engine Fire
- Engine Fire Checklist

CPT

- Dual Hydraulic System Failure

NON-NORMAL and EMERGENCY PROCEDURES

- Engine Fire
- Wheel Well Fire
- Cabin Smoke or Fire
- Emergency Descent
- Electrical Smoke or Fire
- Loss of Thrust on Both Engines
- In-flight Engine Start
- Wing Anti-Ice Malfunctions
- Air Conditioning Smoke

DESCENT AND APPROACH PROCEDURES

- Area Arrival and ILS Approach
- Pilot Flying/Pilot Not Flying Callouts and Duties
- **Descent/Approach** Checklist

EMERGENCY LANDING

- Landing Gear Disagreement
- Pilot Flying/Pilot Not Flying Callouts and Duties
- Gear Disagreement Procedure

EVACUATION

- **Passenger Evacuation** Checklist

DEBRIEFING:

Review of Period 5.
Preview of Period 6 and CAA check.

PERIOD 6

4:00 HOURS

BRIEFING ITEMS:

1. Non-Normal and Emergency Checklists.
2. Review all Memory Items.
3. Aircraft Systems.
4. Review Performance and Limitations.
5. FMS and CRM (Assumed Temperature Takeoff)

CPT

TRAINING SYLLABUS:

PREFLIGHT DUTIES

- Cockpit Set-Up Flow
- **Preflight/Before Start** Checklist

ENGINE STARTING

- Hot Start, Hung Start, No EGT Rise
- **Before Takeoff** Checklist

PUSHBACK/TAXIING PROCEDURES

- Taxi
- Antiskid Light On
- **Takeoff** Checklist

TAKEOFF AND INITIAL CLIMB

- Normal Takeoff and Area Departure (icing conditions, including autopilot/flight director use)
- Gear Handle Will Not Go Up
- **After Takeoff** Checklist

NON-NORMAL OPERATING PROCEDURES (Icing Conditions)

- Flight Management and Navigation review

NON-NORMAL and EMERGENCY PROCEDURES


- Engine Fire
- Wheel Well Fire
- Cabin Smoke or Fire
- Emergency Descent
- Electrical Smoke or Fire
- Loss of Thrust on Both Engines
- **Inflight Engine Start**
- Loss of Both Generators

DESCENT AND APPROACH PROCEDURES

- Area Arrival and ILS Approach
- Pilot Flying/Pilot Not Flying Callouts and Duties
- **Descent/Approach** Checklist

EMERGENCY LANDING

- Pilot Flying/Pilot Not Flying Callouts and Duties

 <p>ABC Airline TRAINING MANUAL</p>	<p>Training Manual</p>	<p>APPENDIX C ORIG.00 5MAY07</p>
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CPT

- **Emergency Landing Checklist**
- EVACUATION**
- **Passenger Evacuation Checklist**
- DEBRIEFING:**

Critique of Period 6.

Instructor must ensure that type rating application is completed and ready for CAA.