This Flight Crew Training Manual is an essential tool to learn the ATR standard operating procedures. It has been conceived as the standard baseline for all ATR flight crew training. To facilitate the learning process, procedures are presented in a pedagogical and user-friendly way, with, when necessary, a visualization of cockpit flows and schematics of flight patterns.

This manual is a comprehensive document that efficiently complements FCOM procedures.

In the Normal Procedures part, procedures are presented with detailed task sharing and include standard call outs. Additional procedures relating to specific operations and to equipments uses are part of this manual.

In the Emergency & Abnormal Procedures part, the general management of abnormal situations is explained. Then, a detailed presentation of the procedures to apply per specific situation is made.

**NB: Should you find any discrepancy in the emergency procedures between the FCTM and the AFM, please follow the AFM procedures.**

The Training and Flight Operations support team.
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1. Fly
2. Navigate
3. Understand problem before acting & assess situation
4. One head up at all times
5. Know and understand your FMA at all times
6. Practice task sharing and back up each other
7. Respect Stabilisation Criteria in Approach
8. Monitor navigation accuracy
9. No major reprogramming below FL 100
10. Use the proper level of automation
11. Respect checklists priority
12. Use team resources to build up decisions

02. NORMAL PROCEDURES

02.01. GENERAL PROCEDURES & POLICIES

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      4.1. Altimeter setting
      4.2. Radioaltimeter setting
   5. Speed bugs policy
      5.1. Take-off speed bugs
      5.2. Cruise speed bugs
      5.3. Approach speed bugs
   6. Torque bugs policy
      6.1. Take-off torque bugs
      6.2. Cruise torque bugs
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7. Before taxi
8. Taxi
9. Before take-off
10. Take-off
11. After take-off
12. Climbing through FL100
13. Cruise
14. Before descent
15. Descending through FL 100
16. Approach
17. Before landing
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19. Go-around
20. After landing
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      1.1.1. Long transit in Hotel mode
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   2.1. Power back
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3. Noise abatement procedures

4. Operations in icing conditions

5. Wet and contaminated runways operations

6. Low visibility operations

7. Performance Based Navigation operations

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1. Wake Turbulence
   1.1. Description
   1.2. ICAO recommendations
   1.3. Reporting procedure

2. Windshear
   2.1. Description
   2.2. Detection
   2.3. Defence
   2.4. Procedures
      2.4.1. Take-off procedure
      2.4.2. Approach procedure
      2.4.3. Reporting procedure

3. Approach to stall and stall recovery
   3.1. Description
   3.2. Detection
   3.3. Procedures
      3.3.1. Stall procedure
      3.3.2. Stick pusher procedure
      3.3.3. Procedure at lift-off
      3.3.4. Reporting procedure

4. Unusual attitude recovery
   4.1. Bounce landing
      4.1.1. Description
      4.1.2. Defence
      4.1.3 Procedure
   4.2. Upset
      4.2.1 Description
      4.2.2. Nose Up
      4.2.3. Nose Down
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   5.1. Description
   5.2. Detection
   5.3. Procedure
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   8.1. Traffic Advisory
      8.1.1. Description
      8.1.2. Procedure
   8.2. Resolution Advisory
      8.2.1. Description
      8.2.2. Procedure
8.3. Reporting procedure
9. Managing APM advisories

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1. On ground engine fire
2. Engine fire at take-off
3. Engine flame out at take-off
4. Single Engine Operation
5. Single Engine Go-around
6. Emergency Descent

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04.02. NORMAL PROCEDURES
1. Take-off
2. ILS Precision Approach
3. Non Precision Approach
4. Circle-to-Land
5. Go-around
6. Standard traffic pattern (1500 ft AAL)

04.03. ABNORMAL & EMERGENCY PROCEDURES
1. On ground engine fire
2. Engine fire at take-off
3. Engine flame out at take-off
4. Single Engine Non Precision Approach
5. Single Engine Go-around
1. Crew

CM1 is the Captain, sat in the left hand seat and CM2 is the first officer, in the right hand seat.

PF is the Pilot Flying. PM is the Pilot Monitoring.

2. Procedure

Each flight phase is associated with a specific list of action designated as “procedure” and performed by crew from memory.

A procedure is triggered by “XXX procedure” callout. It is performed before the relevant checklist.

Example: Before take-off procedure

3. Checklist

Normal checklists are used to check main actions were correctly performed.

NOTE: Procedures and checklists contained in this manual comply with all relevant sections of AFM, FCOM and QRH.

4. Emergency & abnormal situation

4.1. Emergency situation

ICAO definition

A condition of being threatened by serious and/or imminent danger and requiring immediate assistance.

It’s generally triggered by Master Warning + Continuous Repetitive Chime + red light on CAP, and refers to an Emergency C/L (red).

Example: Engine fire, Smoke

4.2. Abnormal situation

ICAO definition

A condition involving an aircraft or other vehicle safety, or some onboard or insight person but not requiring immediate assistance.

It’s generally triggered by Master Caution + Single Chime + amber light on CAP, and refer to a Following failure C/L (amber). If no immediate action is required, PF may delay crew actions or C/L, if necessary.

Example: Pack valve fault
### 4.3. Standard communication

<table>
<thead>
<tr>
<th><strong>Distress (Emergency) message</strong></th>
<th><strong>Urgency (Abnormal) message</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) MAYDAY; MAYDAY; MAYDAY;</td>
<td>(a) PAN PAN; PAN PAN; PAN PAN;</td>
</tr>
<tr>
<td>(b) Addressed station identification (when appropriate, with permitting time and circumstances);</td>
<td></td>
</tr>
<tr>
<td>(c) Callsign;</td>
<td></td>
</tr>
<tr>
<td>(d) Type of aircraft;</td>
<td></td>
</tr>
<tr>
<td>(e) Nature of problem;</td>
<td></td>
</tr>
<tr>
<td>(f) In-charge crew member intentions.</td>
<td></td>
</tr>
</tbody>
</table>
1. Task sharing

Final decision always belongs to Captain.

When it comes to procedures, general task sharing as stated below is applicable:

<table>
<thead>
<tr>
<th>PF is in charge of:</th>
<th>PM is in charge of:</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Flight Path</td>
<td>• Flight path, navigation &amp; systems monitoring</td>
</tr>
<tr>
<td>• Navigation</td>
<td>• Communication</td>
</tr>
<tr>
<td>• Aircraft configuration</td>
<td>• Checklist reading</td>
</tr>
<tr>
<td>• Procedure initiation</td>
<td></td>
</tr>
</tbody>
</table>

During Emergency or abnormal C/L, PF is in charge of communication

2. Function assignment

<table>
<thead>
<tr>
<th>FLIGHT PHASES</th>
<th>CM1</th>
<th>CM2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>ON THE GROUND &lt; 70Kt</strong></td>
<td>PF(1)</td>
<td>PM</td>
</tr>
<tr>
<td><strong>ON THE GROUND &gt; 70Kt</strong></td>
<td>PM</td>
<td>PF</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>IN FLIGHT</strong></td>
<td>PM</td>
<td>PF</td>
</tr>
</tbody>
</table>

- Captain is **PF** for any action, except engine start which is performed by **CM2**.
- **CM1 & CM2** take turns for **PF & PM**, as decided in the Captain’s briefing.

**IMPORTANT:** Pilot actually flying keeps his function throughout emergency and/or abnormal procedures. Following emergency or abnormal events, PF assesses the situation then suggests a decision, ratified by the Captain.

**Transferring flight controls**

PF function may be transferred, due to external factors, with the following callout:

“YOUR CONTROL” or “YOU HAVE CONTROL”

Pilot being assigned PF functions calls back:

“MY CONTROL” or “I HAVE CONTROL”

Following PF / PM functions transfer, crew must reassign and check AFCS’s coupling side to the new PF.

Whenever possible and prior to transfer, PF must call back main flight path parameters to PM.
5. Final cockpit preparation

**Flight events**

**PRELIMINARY COCKPIT PREPARATION COMPLETE**

- **CM1**
  - CALL "FINAL COCKPIT PREPARATION PROCEDURE"
  - DO
    - FUEL QTY .................. CHECK / BALANCED
    - QNH ................ SET OWN + STBY / CHECK
    - PARKING BRAKE .......... ON / PRESS CHECK

- **CM2**
  - DO
    - ATIS........................................ OBTAIN
    - TAKE-OFF DATA CARD........... FILL 1ST PART(1)
    - QNH ..................................... SET / CHECK

**CREW READY FOR DATA CARD 1ST PART PROCEEDING**

- **PM**
  - DO
    - NAVAIDS & GNSS............... SET
      According to expected SID.
    - VHF 1 & 2.................................. SET

- **PF**
  - READ & DO
    - TAKE-OFF DATA CARD... 1ST PART PROCEED(2)
    - DEPARTURE BRIEFING......... PERFORM(2)
  - CALL & READ
    - "FINAL COCKPIT PREPARATION PROCEDURE COMPLETE"

- **CM1**
  - REPLY & REQUIRE
    - "FINAL COCKPIT PREPARATION CHECKLIST"

- **CM2**
  - CALL & READ
    - "FINAL COCKPIT PREPARATION CHECKLIST"
      Refer to QRH 6.01
    - "FINAL COCKPIT PREPARATION CHECKLIST COMPLETE"

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(1) Refer to 02.01.07.1. Take-off data card.
(2) Refer to 02.01.08.1. Departure Briefing.
1. Take-off

**PM ACTIONS DURING CLIMB PROCEDURE:**
- Set IAS 170 KTS (Pitch Wheel)
- Set PWR MGT ON CLIMB
- Bleed Valves set on (if off)

**PM ACTIONS AT LANDING GEAR RETRACTION:**
- Set L/G lever up
- Set Yaw Damper on
- Set Taxi and T/O Light off

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**PM ACTIONS DURING CLIMB PROCEDURE:**
- Set Speed Bug 170 (160)
- White Bug +10 (normal conditions)
- White Bug +10 (icing conditions)

**PM ACTIONS AT LANDING GEAR RETRACTION:**
- Set L/G lever up
- Set Yaw Damper on
- Set Taxi and T/O Light off
Dear Customer,

This is an extract of the ATR Flight Crew Training Manual - 2012 edition, available in paper or electronic copy. Should you need any further information, please contact the ATR Training Center atc@atr.fr

Yours faithfully,

Your ATR Training & Flight Operations support team