

# Senior and staff cadet training

ACP 34  
Aircraft operation  
Volume 3

*Aircraft Handling*



Course	Aircraft Operations, Aircraft handling, ACP 34 volume 3		
Lesson Number	Chapter	Title	Notes
1	1	Aircraft maintenance	<ol style="list-style-type: none"> <li>1. Introduction</li> <li>2. Maintenance policy and objectives</li> <li>3. Preventive maintenance</li> <li>4. Corrective maintenance</li> <li>5. Contingency maintenance</li> <li>6. Modifications</li> <li>7. Mod form 700 series</li> <li>8. Self assessment questions</li> </ol>
2	2	Ground handling	<ol style="list-style-type: none"> <li>1. Introduction</li> <li>2. Seeing in and seeing off</li> <li>3. Marshalling</li> <li>4. Marshalling procedure – day</li> <li>5. Marshalling procedure – night</li> <li>6. Danger zones</li> <li>7. Wheel and brake fires</li> <li>8. Manhandling and towing</li> </ol>
3			<ol style="list-style-type: none"> <li>1. Refueling</li> <li>2. Pressure refueling</li> <li>3. Type of fuel</li> <li>4. Loading</li> <li>5. Conclusion</li> <li>6. Self assessment questions</li> </ol>
4	3	Preparation for flight	<ol style="list-style-type: none"> <li>1. Aircraft captain</li> <li>2. Personal preparation</li> <li>3. Flight planning</li> <li>4. Briefing of passengers</li> <li>5. Authorization of the flight</li> <li>6. Mod form 700 series</li> </ol>
5			<ol style="list-style-type: none"> <li>1. Pre-flight checks</li> <li>2. External checks</li> <li>3. Checks before starting</li> <li>4. Checks after start-up</li> <li>5. Taxiing</li> <li>6. Pre-take-off checks</li> </ol>
6			<ol style="list-style-type: none"> <li>1. Marshalling signals</li> <li>2. Self assessment questions</li> </ol>
7	4	General flying	<ol style="list-style-type: none"> <li>1. Introduction</li> <li>2. Holding position</li> <li>3. Checks</li> <li>4. Throttle</li> <li>5. Factors affecting the length of the take-off run                             <ol style="list-style-type: none"> <li>a) All-up weight</li> <li>b) Amount of flap used</li> <li>c) Engine power</li> <li>d) Wind velocity</li> <li>e) Runway gradient</li> <li>f) Condition of runway surface</li> <li>g) Air temperature</li> <li>h) Airfield elevation</li> </ol> </li> <li>6. Take-off technique: nose wheel aircraft</li> <li>7. Take-off technique: tail wheel aircraft</li> <li>8. Scrambling</li> <li>9. Action when airborne</li> <li>10. Use of reheat</li> </ol>

8			<ol style="list-style-type: none"> <li>1. The circuit <ol style="list-style-type: none"> <li>a) General considerations</li> <li>b) Procedure for joining the circuit</li> <li>c) Circuit pattern</li> </ol> </li> <li>2. The approach <ol style="list-style-type: none"> <li>a) General consideration</li> <li>b) Use of flap</li> <li>c) Effect of wind</li> <li>d) Wind gradient and gusts</li> <li>e) Techniques</li> </ol> </li> <li>3. Landing <ol style="list-style-type: none"> <li>a) Considerations</li> <li>b) Definitions</li> <li>c) Landing technique: Nose wheel aircraft</li> <li>d) Landing technique: Tail wheel aircraft</li> <li>e) Wheel landing</li> <li>f) Cross-wind approach and landing</li> <li>g) Landing run</li> <li>h) Procedure after landing</li> </ol> </li> <li>4. Self Assessment Questions</li> </ol>
9	5	Aerobatics and formation flying	<ol style="list-style-type: none"> <li>1. Introduction</li> <li>2. Aerobatics</li> <li>3. Basic maneuvers <ol style="list-style-type: none"> <li>a) The loop</li> <li>b) The barrel roll</li> <li>c) The slow roll</li> <li>d) The stall turn</li> <li>e) Roll off the top</li> </ol> </li> </ol>
10			<ol style="list-style-type: none"> <li>1. Advanced maneuvers <ol style="list-style-type: none"> <li>a) Half roll and pull through</li> <li>b) The upward roll</li> <li>c) Aileron turn</li> <li>d) The Derry turn</li> <li>e) The vertical eight</li> <li>f) Horizontal figure eight</li> <li>g) Hesitation rolls</li> <li>h) Inverted flight</li> </ol> </li> </ol>
11			<ol style="list-style-type: none"> <li>1. Formation flying <ol style="list-style-type: none"> <li>a) Introduction</li> <li>b) Leadership</li> <li>c) The section</li> <li>d) Vic</li> <li>e) Echelon</li> <li>f) Line abreast</li> <li>g) Line astern</li> <li>h) Box</li> </ol> </li> </ol>
12			<ol style="list-style-type: none"> <li>1. Close formation flying techniques <ol style="list-style-type: none"> <li>a) Relative speeds</li> <li>b) Apparent size</li> <li>c) Distance</li> </ol> </li> <li>2. Joining formation</li> <li>3. Positions in basic formation</li> <li>4. Keeping station <ol style="list-style-type: none"> <li>a) Longitudinal station keeping</li> <li>b) Lateral station keeping</li> <li>c) Vertical station keeping</li> </ol> </li> <li>5. Conclusion</li> </ol>
13	6	Emergency procedures	<ol style="list-style-type: none"> <li>1. Introduction</li> <li>2. Degrees of emergency</li> <li>3. Emergency transmissions</li> <li>4. Emergency message</li> <li>5. Emergency procedures and fixer services</li> <li>6. Emergencies involving another aircraft</li> <li>7. Communications failure</li> <li>8. Emergency organisation</li> </ol>
14		Revision	Past Papers
15		Revision	Past Papers
16		Revision	Past Papers