

<b>TSC Category</b>	Aircraft Operations					
<b>TSC</b>	Aircraft Manual Handling					
<b>TSC Description</b>	Operate aircraft to ensure smooth and safe handling during all phases of flights					
<b>TSC Proficiency Description</b>	<b>Level 1</b>	<b>Level 2</b>	<b>Level 3</b>	<b>Level 4</b>	<b>Level 5</b>	<b>Level 6</b>
				<b>ATP-ACO-4005-1.1</b>	<b>ATP-ACO-5005-1.1</b>	
				Manoeuvre the aircraft safely using manual controls and appropriate instruments	Manage the overall manual handling of aircraft to ensure safety during all phases of flights	
<b>Knowledge</b>				<ul style="list-style-type: none"> <li>• Operation of Auto Pilot (AP)/Flight Director (FD) system</li> <li>• Usage of approach visual aids such as Instrument Landing System (ILS) and Precision Approach Path Indicator (PAPI)</li> <li>• Concept of aircraft systems automation</li> <li>• Local and international guidelines such as Air Operator Certificate Requirements (AOCR), Air Navigation Regulations (ANR) and Airline Operations Manual (AOM)</li> </ul>	<ul style="list-style-type: none"> <li>• Operation of Auto Pilot (AP)/Flight Director (FD) system</li> <li>• Usage of approach visual aids such as Instrument Landing System (ILS) and Precision Approach Path Indicator (PAPI)</li> <li>• Concept of aircraft systems automation</li> <li>• Operating minima such as visibility, weather and automation systems</li> <li>• Local and international guidelines such as Air Operator Certificate Requirements (AOCR), Air Navigation Regulations (ANR) and Airline Operations Manual (AOM)</li> </ul>	
<b>Abilities</b>				<ul style="list-style-type: none"> <li>• Utilise appropriate instruments to assist in manual operations</li> <li>• Follow FD guidance and monitor automation systems</li> </ul>	<ul style="list-style-type: none"> <li>• Anticipate potential hazards and risks of landing and plan contingencies</li> <li>• Utilise appropriate instruments to assist in manual operations</li> </ul>	

**SKILLS FRAMEWORK FOR AIR TRANSPORT  
TECHNICAL SKILLS & COMPETENCIES (TSC) REFERENCE DOCUMENT**

				<ul style="list-style-type: none"> <li>• Check and programme the approach plans in ILS</li> <li>• Calculate landing performance based on weight of aircraft, weather and runway conditions</li> <li>• Monitor aircraft structural speeds and g-loading limits to ensure they are not exceeded</li> <li>• Operate aircraft manual controls to manoeuvre the aircraft within the flight envelope</li> </ul>	<ul style="list-style-type: none"> <li>• Follow FD guidance and monitor automation systems</li> <li>• Check and programme the approach plans in ILS</li> <li>• Calculate landing performance based on weight of aircraft, weather and runway conditions</li> <li>• Monitor aircraft structural speeds and g-loading limits to ensure they are not exceeded</li> <li>• Operate aircraft manual controls to manoeuvre the aircraft within the flight envelope</li> <li>• Establish flight environments and take over aircraft if conditions exceed co-pilots' minima</li> </ul>	
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