UNIT 1.08 – LOW LEVEL ENDORSEMENT SYLLABUS

ELEMENT: 1. LEGAL REQUIREMENT

Flying Standard	Pilot Certificate	Inst Rating
1.1 RA-Aus Operations Manual (OM)		
• Pilot demonstrates knowledge of the OM requirements in regard to low flying	2	1
1.2 CAR, CASR, CAO 95.55, 95.32, 95.10		
• Pilot demonstrates knowledge of the legal requirements in regard to low flying	2	1

ELEMENT: 2. AEROPLANE HANDLING

Flying Standard	Pilot Certificate	Inst Rating
2.1 General aeroplane handling at altitude		
• Level turns up to 60° AoB	2	1
• Climbing turns beyond 15° AoB for terrain obstacle clearance	2	1
• Descending turns up to and including 60° AoB	2	1
2.2 Stall symptoms and recovery at altitude		
• Stall symptom recognition and recovery straight and level	2	1
• Stall symptom recognition and recovery up to 60° AoB	2	1
2.3 Advanced manoeuvres at altitude		
• Slow flight	2	1
• Use of flaps for improved visibility and effects of changing flap setting in flight	2	1
• Methods of losing height	2	1
• Manoeuvring at varying airspeeds and angle of bank	2	1
• Visual lookout and scan technique – not to fixate on target objects	2	1

ELEMENT: 3. FACTORS AFFECTING SAFETY DURING LOW LEVEL FLIGHT

Flying Standard	Pilot Certificate	Inst Rating
3.1 The effects of wind		
• Turning to downwind into wind – apparent slip and skid	2	1
• Maintaining balance	2	1
• Power control	2	1
• Effect of drift	2	1
• Wind gradient	2	1
• Effect of wind circulating over undulating country	2	1
• Avoidance of dust devils	2	1
• Additional caution required when adverse weather approaching	2	1
3.2 The effects of turbulence		
• Mechanical turbulence	2	1
• Convection Turbulence	2	1
• Frontal turbulence	2	1
3.3 Effect of light on hazard sighting		
• Poor light – no shadows – easier to hit obstacles	2	1
• Flying into sun – vision affected	2	1
3.4 Lookout		
• Scan technique used	2	1
• Lookout conducted before turns with regard to obstacles	2	1
• Keep head out of cockpit	2	1
3.5 Obstacles		
• Power lines, visual identification from the air, pre-flight large scale map checks, talk to property owners	2	1
• Dangers of new wires and obstacles	2	1
• Types of power lines	2	1
• Pre-construction test towers for wind farms & wind farms	2	1
• Coal gas burn off chimneys - avoid	2	1
3.6 Bird Behaviour		
• Individual	2	1
• Flocks of Birds	2	1
• Understand migratory patterns	2	1

ELEMENT: 4. LOW FLYING

Flying Standard	Pilot Certificate	Inst Rating
4.1 Low level flight over flat terrain		
• Use of power	2	1
• Use of airspeed – avoid slowing down when flying downwind	2	1
• Use of trim	2	1
• Lookout and scan techniques – avoid target fixation	2	1
• Recognition of height at low level – less stress when flying slightly higher	2	1
• False horizons	2	1
• Dangers of flying over calm bodies of water	2	1
4.2 Low level flight over undulating terrain		
• Anticipating the change in airspeed and power required	2	1
• Recognition of anticipation at higher aeroplane weights	2	1
• Effects of high density altitudes	2	1
• Assessment of the wind	2	1
• Always having an escape route	2	1
4.3 Low level medium turns <45° AoB		
• Lookout with reference to changing contours, obstructions and bird hazards	2	1
• Use of power	2	1
• Aeroplane balance	2	1
• Wind drift	2	1
• Consistent Height	2	1
4.4 Low level steep turns 45°- 60° AoB		
• Lookout	2	1
• Use of power	2	1
• Aeroplane balance	2	1
• Wind drift	2	1
• Consistent height	2	1
4.5 Max rate / min radius turns at MTOW		
• Effects of Density Altitude on performance	2	1
• Pre-stall recognition and recovery	2	1
• Use of power	2	1
4.6 Slow flight		
• Use of flaps and effects of changing flap setting in flight	2	1
• Maintaining adequate airspeed above the stall during manoeuvres	2	1
• Use of trim	2	1

4.7 Methods of losing height		
• Use of flap and power • Use of sideslip	2 2	1 1
4.8 Emergency procedures		
• Engine failure at low level • Bird strike / obstacle strike - immediate actions • Loss of visual reference	2 2 2	1 1 1

-End of Low Level Endorsement Syllabus-