**RA-Aus** 

# **UNIT 1.07 - ADVANCED PILOT AWARD SYLLABUS**

# **ELEMENT: 1. AIRMANSHIP**

Flying Standard	Pilot Certificate	Inst Rating
1.1 General Airmanship		
Lookout is maintained during operations on both the ground and in the air	2	1
Scan technique is used to promote lookout	2	1
Decision making is consistent with good aeronautical practice and all normal operating practices and rules are adhered to	2	1
Engine handling is conducted in a manner that is conducive with good aeronautical practices and is consistent with aeroplane Flight Manual	2	1
Ground handling is conducted in a safe manner conducive with good aeronautical practice and its operation prevents damage to it or other aeroplanes or persons on the ground	2	1
A candidate shall not be recommended for the issue of an APA should the testing officer have to take control to prevent a potential airframe or engine exceedance, or for any other safety reason	2	1

# **ELEMENT: 2. TAKE-OFF SAFETY BRIEF**

Flying Standard		Pilot Certificate	Inst Rating
2.1 Engine failure safety bri	ef		
Candidate' pre take-off sfailure on take-off, while	safety brief to include engine	2	1
Engine failure on take-o airborne but with runwa	ff after the aeroplane is	2	1
Engine failure on take-o airborne and must land boundary	ff after the aeroplane is	2	1
	ff after the aeroplane is ht that is consistent with a safe nway heading or execution of a	2	1
with aeroplane perform	ed by direction and is consistent ance and safe aeronautical raphy and the current wind	2	1

# **ELEMENT: 3. STEEP LAZY EIGHTS**

Flying Standard	Pilot Certificate	Inst Rating
3.1 Entry		
<ul> <li>Pre-manoeuvre checks completed</li> <li>Reference point established</li> <li>Entry into the manoeuvre is initiated from straight and level in balanced flight and altitude and airspeed noted</li> </ul>	2 2 2	1 1 1
3.2 Maintenance		
Climbing turn is initiated through 90 degrees at nominated bank angle Turn is continued through 180 degrees and descent is initiated, wings are level through reference point at previous altitude and airspeed Climbing turn is initiated through 90 degrees at	2 2	1 1
nominated bank angle  Turn is continued through 180 degrees and descent is initiated, wings are level through reference point at previous altitude and airspeed	2	1
3.3 Airmanship		
<ul> <li>Lookout is maintained at all times during manoeuvre</li> <li>Aeroplane bank angle does not exceed 60 degrees</li> </ul>	2 2	1 1

# **ELEMENT: 4. MAINTAIN BALANCED FLIGHT**

Flying Standard	Pilot Certificate	Inst Rating
4.1 Co-ordination		
Co-ordination is maintained during all operations with the exception of side slipping and aeroplane is flown smoothly and safely	2	1

# **ELEMENT: 5. STEEP 360 DEGREE GLIDING TURNS**

Flying Standard	Pilot Certificate	Inst Rating
5.1 Entry		
Pre-manoeuvre checks completed  Entry from straight and level at pre-determined angle of bank greater than 45 degrees  Control movements are smooth and co-ordinated	2 2 2	1 1
5.2 Maintenance		
Lookout is maintained prior to entry and during the descending turn     Angle of bank is maintained     Co-ordination is maintained     Airspeed is maintained     Any pre-stall buffet or symptoms of an impending stall are rectified before stall occurs	2 2 2 2 2 2	1 1 1 1
5.3 Exit		
Lookout is maintained on recovery back to straight and level     Recovery back to straight and level is demonstrated     Control movements are smooth and co-ordinated	2 2 2	1 1 1

# **ELEMENT: 6. SIDESLIPPING**

Fly	ing Standard	Pilot Certificate	Inst Rating
6.1	Entry		
•	Lookout is performed before manoeuvre is initiated Controls are crossed to initiate manoeuvre in a smooth manner Aiming point is selected	2 2 2	1 1
6.2	Maintenance		
•	Aeroplane is manoeuvred to maintain aiming point Pre-determined speed is maintained during manoeuvre Lookout continues to be performed	2 2 2	1 1 1
6.3	Exit		
•	Aeroplane controls are uncrossed in a controlled and smooth manner Aeroplane is recovered back to straight and level at a pre-determined height	2	1

# **ELEMENT: 7. SLIPPING TURNS**

Flying Standard	Pilot Certificate	Inst Rating
7.1 Entry		
Lookout is performed before manoeuvre is initiate     Controls are crossed to initiate manoeuvre in a sn manner		1 1
7.2 Maintenance		
Aeroplane is manoeuvred to maintain turn to a pre-determined height, left and right     Lookout continues to be performed	2 2	1
7.3 Exit		
Aeroplane controls are uncrossed in a controlled a smooth manner     Aeroplane is recovered back to straight and level a pre-determined height and heading / direction		1

#### **ELEMENT: 8. PRE-STALL RECOGNITION AND RECOVERY IN A CLIMBING TURN**

Flying Standard	Pilot Certificate	Inst Rating
8.1 Entry		
<ul> <li>Pre-manoeuvre check is completed</li> <li>Controls are used to initiate manoeuvre in a smooth manner to the desired bank angle in the climb</li> </ul>	2 2	1 1
8.2 Maintenance		
<ul> <li>Aeroplane is eased into the stall by applying back pressure on the controls</li> <li>Lookout continues to be performed</li> </ul>	2 2	1
8.3 Exit		
<ul> <li>Aeroplane is recovered at point of stall using normal recovery procedure</li> <li>Aeroplane is recovered back to straight and level with minimum height loss conducive with aeroplane type</li> </ul>	2 2	1

**SYLLABUS OF FLIGHT TRAINING** 

# ELEMENT: 9. PRE-STALL RECOGNITION AND RECOVERY FROM A STEEP GLIDING TURN

Flying Standard	Pilot Certificate	Inst Rating
9.1 Entry		
Pre-manoeuvre check is completed Controls are used to initiate manoeuvre in a smooth manner Aeroplane is rolled to achieve pre-determined angle of bank	2 2 2	1 1
9.2 Maintenance		
Aeroplane is eased into the stall by applying back pressure on the controls     Lookout continues to be performed	2	1
9.3 Exit		
Aeroplane is recovered at point of stall using normal recovery procedure     Aeroplane is recovered back to straight and level with minimum height loss conducive with aeroplane type	2	1

# ELEMENT: 10. GROUND REFERENCE MANOEUVRES (Constant Altitude/Radius Turns)

Flying Standard	Pilot Certificate	Inst Rating
10.1 Entry		
Lookout is performed before manoeuvre is initiated     Controls are used to initiate turn in a smooth manner	2 2	1 1
10.2 Maintenance		
Aeroplane is turned to describe a constant radius ground track adjusted for wind     Altitude is maintained	2	1
Lookout continues to be performed	2	1
10.3 Exit		
Aeroplane is recovered back to straight and level	2	1

# **ELEMENT: 11. GLIDE FROM OVERHEAD THE FIELD**

Fly	ing Standard	Pilot Certificate	Inst Rating
11.	1 Aeroplane positioning		
•	Aeroplane is positioned appropriately for the intended landing area at 1000FT AGL (or on downwind as traffic / regulations require)	2	1
11.	2 Glide		
•	Power is reduced to idle with aeroplane in balance, best glide speed is selected and maintained	2	1
11.	3 Touchdown point nominated		
•	Touchdown point is selected on landing area Aeroplane is manoeuvred to touchdown on or after nominated point	2 2	1 1
11.	4 Lookout		
•	Lookout is maintained during manoeuvre and all required radio calls are correctly made	2	1

# **ELEMENT: 12. CROSSWIND TAKE-OFF AND LANDING**

Flying Standard	Pilot Certificate	Inst Rating
12.1 Take-off		
Candidate conducts a smooth take-off     Maintains track of runway extended centreline on climb out	2 2	1 1
12.2 Circuit		
Aeroplane maintains normal circuit parameters allowing for wind speed and direction	2	1
12.3 Approach		
Aeroplane maintains track over extended centreline on final	2	1
12.4 Lookout		
Lookout is maintained during manoeuvre and all required radio calls are correctly made	2	1

# **ELEMENT: 13. SHORT FIELD APPROACH**

Flying Standard	Pilot Certificate	Inst Rating
13.1 Pre-Landing Checks		
Pre-landing checks are correctly carried out	2	1
13.2 Airspeed maintenance		
Airspeed maintained on final at a nominated approach speed consistent with aeroplane type and prevailing weather conditions	2	1
13.3 Use of Power		
Pilot recognises overshoot / undershoot conditions and adjusts power / attitude to correct	2	1
13.4 Touchdown Point		
Aeroplane touches down on or within 30M beyond the nominated touchdown point	2	1
<ul> <li>Application of brake to minimise ground run</li> </ul>	2	1

# **ELEMENT: 14. WEIGHT AND BALANCE**

Flying Standard	Pilot Certificate	Inst Rating
14.1 Loading, and Weight and Balance		
Explain the loading and weight and balance limitations of the aeroplane to be used. List ways the aeroplane may be loaded that may affect its safety	2	1

# **ELEMENT: 15. PERFORMANCE FIGURES**

Fly	ring Standard	Pilot Certificate	Inst Rating
15.	1 MTOW		
•	Quote aeroplane MTOW as per Flight Manual	2	1
15.	2 Normal Approach		
•	Quote aeroplane normal approach speed	2	1
15.	3 Vs		
•	Quote aeroplane stall speed at MTOW	2	1
15.	4 Va		
•	Quote aeroplane manoeuvring speed	2	1
15.	5 Vne		
•	Quote aeroplane never exceed speed	2	1
15.	6 Short Field Approach Speed		
•	Quote recommended aeroplane short field approach speed	2	1

-End of Advanced Pilot Award Syllabus-