UNIT 1.01 – GROUP A (3-AXIS) SYLLABUS

ELEMENT: 1. FLIGHT PREPARATION AND GROUND HANDLING

CODE: FP	Before Solo	Pilot Certificate	Inst Rating
1.1 Complete pre and post flight administration			
• Daily and pre-flight inspection conducted including checking of fluid levels and aeroplane serviceability	3	2	1
• Aeroplane is prepared for flight-untied or moved to appropriate start up area	3	2	1
• Equipment and documentation as required by legislation is identified and secured in the aeroplane, and internal and external checks are completed in accordance with approved checklist	3	2	1
• Aeroplane take-off and landing performance and weight and balance is calculated in accordance with the aeroplane Flight Manual for the proposed operation and ambient conditions	3	2	1
• Pre and post flight logbook and flight administration is completed in accordance with Technical manual and/or Operations manual	3	2	1
1.2 Cockpit familiarisation			
• Aeroplane instruments, use of adjustable items and emergency equipment use	3	2	1
1.3 Fuel System.			
• Components of fuel system	3	2	1
1.4 Plan Fuel Requirements			
• Flight, (holding and alternate – when appropriate) fuel determined.	3	2	1
• Fuel reserves determined.	3	2	1
• Total fuel requirement determined.	3	2	1
1.5 Refuel aeroplane			
• Aeroplane is refuelled in accordance with Flight Manual, health and safety and local requirements.	3	2	1
1.6 Perform checks as appropriate			
• Pre-start, after start, taxiing and run-up checks	3	2	1
• Vital actions before take-off, checks during and after take-off, climb or descend checks	3	2	1
• Pre-landing and after landing checks	3	2	1
• Pre-shut down and after shut down checks	3	2	1
• Aeroplane secured after flight, post-flight checks	3	2	1
1.7 Taxiing aeroplane			

• Lookout and situational awareness	3	2	1
• Directional control and turning, including manoeuvring in confined spaces	3	2	1
• Effect of wind with regard to positioning of controls	3	2	1
• Propeller care and consideration of prop wash and slipstream	3	2	1
• Ground surface and slope considerations	3	2	1
• Appropriate taxiing speed	3	2	1
• Emergency situations including loss of steering, brakes or other emergencies are managed in accordance with Flight Manual.	3	2	1
1.8 Procedures			
• Taxi clearance or call is obtained or broadcast as applicable	3	2	1
• Correct airmanship demonstrated	3	2	1
• Approved marshalling signals are utilised	3	2	1

ELEMENT: 2. RADIO EQUIPMENT AND PROCEDURES

CODE: FR	Before Solo	Pilot Certificate	Inst Rating
2.1 Radio equipment			
• Familiarisation with radio equipment	3	2	1
• Familiarisation with intercom	3	2	1
• Familiarisation with transponder (if applicable)	3	2	1
2.2 Procedures			
• Radio use and procedures	3	2	1

ELEMENT: 3. EFFECT OF CONTROLS

CODE: EC	Before Solo	Pilot Certificate	Inst Rating
3.1 Airmanship considerations			
• Lookout	3	2	1
• Situational awareness	3	2	1
• Handover and take over procedures	3	2	1
• Follow me through procedures	3	2	1
3.2 Primary effects			
• Elevator	3	2	1
• Aileron	3	2	1
• Rudder	3	2	1
3.3 Secondary and further effects			
• Further effect of elevator	3	2	1
• Secondary effect of aileron	3	2	1
• Secondary effect of rudder	3	2	1
3.4 Ancillary controls and additional effects			
• Effect of airspeed	3	2	1
• Effect of slipstream	3	2	1
• Effect of power	3	2	1
• Control response at varying speeds and power settings	3	2	1
• Control response relative to aeroplane axis at any attitude	3	2	1
• Trim system	3	2	1
• Effects of flap (if fitted)	3	2	1
• Instrument indications			

ELEMENT: 4. STRAIGHT AND LEVEL

CODE: SL	Before Solo	Pilot Certificate	Inst Rating
4.1 Airmanship considerations			
• Lookout	3	2	1
• Use of clock code	3	2	1
• Situational awareness	3	2	1
• Scanning and work cycle to ensure correct management of S & L	3	2	1
• Identification of training area boundaries	3	2	1
4.2 Maintain straight and level flight			
• Straight and level - normal cruise (adjusting for heading or height deviations, or by instructor's direction)	3	2	1
• Straight and level - varying airspeeds (adjusting for heading or height deviations, or by instructor's direction)	3	2	1
• Balance technique	3	2	1
• Trim technique	3	2	1
• Stability considerations - lateral and longitudinal	3	2	1

ELEMENT: 5. CLIMBING AND DESCENDING

CODE: CD	Before Solo	Pilot Certificate	Inst Rating
5.1 Airmanship			
• Lookout prior to entering climb or descent	3	2	1
• Lookout and engine monitoring during climb or descent manoeuvres	3	2	1
• Situational awareness	3	2	1
5.2 Climbing aeroplane			
• Correct technique for climb entry	3	2	1
• Maintenance of required climb performance	3	2	1
• Return to straight and level	3	2	1
• Effect of flap	3	2	1
• Normal/cruise climb	3	2	1
• Best rate of climb	3	2	1
• Best angle of climb	3	2	1
5.3 Descending aeroplane			
• Correct technique for descent entry	3	2	1
• Maintenance of required descent performance	3	2	1
• Return to straight and level	3	2	1
• Effect of flap	3	2	1
• Glide descent	3	2	1
• Cruise descent	3	2	1
• Emergency descent	3	2	1

ELEMENT: 6. TURNING

CODE: TN	Before Solo	Pilot Certificate	Inst Rating
6.1 Airmanship			
• Lookout prior to entering turn, during turn and prior to exit	3	2	1
• Airframe limitations	3	2	1
• Situational awareness	3	2	1
6.2 Level Turns			
• Entry / exit technique with due regard to adverse aileron yaw	3	2	1
• Maintenance of turn performance	3	2	1
• Exit technique to specific geographic feature or compass heading	3	2	1
• Turns (30° AoB)	3	2	1
• Turns (45° AoB)	3	2	1
• Turns (60° AoB as appropriate)	3	2	1
6.3 Climbing turns			
• Climbing turns (15° AoB)	3	2	1
• Climbing turns - effect on climb rate at bank angles >15° AoB	3	2	1
6.4 Descending turns			
• Medium descending turns (30° AoB)	3	2	1
• Steep descending turns (45° AoB)	3	2	1

ELEMENT: 7. STALLING

CODE: ST	Before Solo	Pilot Certificate	Inst Rating
7.1 Airmanship			
• Pre manoeuvre checks carried out including height considerations / limitations	3	2	1
• Airspace cleared prior to each stall	3	2	1
• Airframe limitations	3	2	1
• Appropriate orientation	3	2	1
• Situational awareness	3	2	1
7.2 Stall and recover aeroplane with or without flaps (if fitted)			
• Correct entry technique from straight & level with and without flap	3	2	1
• Recognise symptoms of approaching stall and pre-stall recovery (all configurations)	3	2	1
• Recognise developed stall and post-stall recovery (all configurations) - with and without power	3	2	1
• Minimum height loss during recovery	3	2	1
• Correct recovery technique when wing drops	3	2	1
7.3 Stall and recover aeroplane in various attitudes with or without flaps and with various power settings			
• Correct entry technique for stall in nominated configuration	3	2	1
• Recognise symptoms of approaching stall and pre-stall recovery (all configurations)	3	2	1
• Correct recovery technique - with power (if available)	3	2	1
• Minimum height loss during recovery	3	2	1
7.4 Demonstration of stall entry at greater than 1G			
• Critical angle of attack is exceeded at a higher airspeed	-	-	1

ELEMENT: 8. CIRCUITS

CODE: CT	Before Solo	Pilot Certificate	Inst Rating
8.1 Airmanship			
• Effects of ambient weather conditions and fly neighbourly matters	3	2	1
• Circuit traffic levels and appropriate spacing	3	2	1
• Situational awareness - including circuit / inbound / outbound traffic	3	2	1
• Appropriate entry and exit runway procedures	3	2	1
8.2 Conduct circuits			
• Normal circuit	3	2	1
• Low level circuit	3	2	1
8.3 Take-offs and approaches / landings			
• Normal take-off	3	2	1
• Crosswind take-off	3	2	1
• Short field take-off	3	2	1
• Soft field take-off	3	2	1
• Glide approach and landing	3	2	1
• Powered approach and landing	3	2	1
• Cross wind approach and landing	3	2	1
• Short field approach and landing	3	2	1
• Full stop landing	3	2	1
• Touch and go landing	3	2	1
• Stop and go landing	3	2	1
• Flapless approach and landing (as applicable)	3	2	1
8.4 Short field circuits			
• Take off with due regard for short field procedures	3	2	1
• Appropriate circuit profile and procedures	3	2	1
• Powered approach and landing	3	2	1
• Brakes applied and controlled as appropriate	3	2	1
8.5 Emergencies and precautions in the circuit			
• Aborted take off	3	2	1
• Engine failure after take off	3	2	1
• Engine failure elsewhere in circuit	3	2	1
• Partial power failure and abnormal instrument indications	3	2	1
• Ancillary control failures including flaps, trim, etc.	3	2	1
• Flight instrument failures	3	2	1
• Undercarriage or tyre problems	3	2	1
• Considerations due to animal hazards	3	2	1
• Engine management considerations	3	2	1

8.6 Go-around procedures			
• Procedure from base leg	3	2	1
• Procedure from final approach	3	2	1
• Recovery from an unstable approach	3	2	1
• Procedure from overshoot or undershoot position	3	2	1
• Procedure after bounce or balloon	3	2	1
• Recognition and appropriate procedure from pilot induced oscillation	3	2	1
• Awareness of engine management considerations	3	2	1

ELEMENT: 9. FORCED LANDING AND PRECAUTIONARY SEARCH

CODE: FL	Before Solo	Pilot Certificate	Inst Rating
9.1 Airmanship			
• Lookout	3	2	1
• Situational awareness	3	2	1
• Engine clearing / warming	3	2	1
9.2 Forced landings			
• Initial actions	3	2	1
• Best glide speed selected and trim	3	2	1
• Landing area general selection	3	2	1
• Radio broadcast (mayday)	3	2	1
• Detailed trouble checks	3	2	1
• Engine restart (if applicable) and management considerations	3	2	1
• Activation of PLB/ELT	3	2	1
• Passenger brief	3	2	1
• Shutdown checks (as appropriate)	3	2	1
• Go-around height when undertaking training	3	2	1
9.3 Sideslip aeroplane			
• Aerodynamic or airframe limitations considered and complied with	3	2	1
• Correct entry technique utilised	3	2	1
• Slip conducted with or without flaps (subject to Flight Manual limitations)	3	2	1
• Slip is maintained and monitored throughout manoeuvre	3	2	1
• Slipping turns	3	2	1
• Correct exit technique utilised	3	2	1
9.4 Precautionary search and landing			
• Determine need	3	2	1
• Advice to ATS or other aeroplanes (as applicable)	3	2	1
• Field selection	3	2	1
• Inspection runs	3	2	1
• Go-around height for training purposes	3	2	1

ELEMENT: 10. OPERATIONS IN THE TRAINING AREA

CODE: TA	Before Solo	Pilot Certificate	Inst Rating
10.1 Airmanship			
• Approval and duration of flight is determined	3	2	1
• Situational awareness of traffic and weather requirements	3	2	1
• Fuel requirements	3	2	1
• Lost procedures (if appropriate)	3	2	1
• Training area boundaries	3	2	1
10.2 Transit to and from training area			
• Circuit departure procedures	3	2	1
• Circuit joining procedures	3	2	1
• Transit to and from training area	3	2	1

ELEMENT: 11. MANAGE ABNORMAL SITUATIONS AND EMERGENCIES

CODE: EO	Before Solo	Pilot Certificate	Inst Rating
11.1 Control systems			
• Procedures for flight control loss or malfunction	3	2	1
• Procedures for ancillary control loss or malfunction	3	2	1
• Airframe including flaps or hatches, etc.	3	2	1
11.2 Other abnormal or emergency situations			
• Fire, smoke or fumes	3	2	1
• Recovery from unusual attitudes	3	2	1
• Spiral dive recognition and recovery	3	2	1
• Collision avoidance / controllability checks after a collision	3	2	1
• Loss of radio or intercom transmissions	3	2	1
• Airspeed indicator, altimeter or other instrument malfunction	3	2	1
• Ditching (type specific)	3	2	1

-End of Group A Syllabus-