

SECTION 3.04

SYLLABUS OF RECREATIONAL FLIGHT TRAINING

LEVELS OF KNOWLEDGE AND APPLICATION

The following syllabi specify the **MINIMUM** standard of knowledge required. Qualifying numbers are used to indicate the specific levels of knowledge necessary for each individual item within a particular subject, as follows:

- **Standard 3** is the required competency for solo conduct of the intended operation. This code represents the competency of the member to perform the activity correctly without instructional assistance under carefully supervised conditions in a safe environment.
- **Standard 2** is the competency required for the operation to be safely completed at a pilot certificate level. This represents the member's ability to be able to competently and without instructional assistance, perform the activity correctly and adjust actions to cope with emergencies under uncontrolled environments.
- **Standard 1** is the requirement for instructors wishing to teach the endorsement. This standard represents the instructor's ability to competently perform the required activity with a high degree of accuracy and in a professional and competent manner in uncontrolled environments and adjust actions to cope with emergencies in a highly consistent manner, facilitating the instruction of the activity to a student.

These codes are the basis of assessing competency in the required fields of the assessment guide. The assessment guide will give specific boundaries for the assessment of the competency, such as +/- 50ft etc. In order to establish consistency this accuracy must also be witnessed by the instructor on greater than two occasions to ascertain proficiency in the required competency.

RECREATIONAL AVIATION AUSTRALIA Inc. HIGH PERFORMANCE SYLLABUS

For Recreational Aviation Australia registered aircraft with a cruising speed greater than 80kts.

UNIT: 1. MANAGE PRE AND POST FLIGHT ACTIONS.

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
1.1 Complete pre and post flight administration.			
• Pre-flight planning and documentation is completed in accordance with regulations and/or operations manual.	3	2	1
• Aeroplane take-off and landing performance is calculated in accordance with performance and weight and balance charts.	3	2	1
• Pre and post flight logbook and flight administration is completed in accordance with tech manual and/or operations manual.	3	2	1
• Aeroplane serviceability is determined by daily inspection, and certification of daily inspection in maintenance logbook is completed in accordance with regulations.	3	2	1
1.2 Perform pre-flight inspection.			
• Equipment and documentation as required by regulation is identified and secured in the aeroplane, and internal and external checks are completed in accordance with approved checklist.	3	2	1
1.3 Perform and certify daily inspection.			
• A daily inspection of aeroplane is performed in accordance with aeroplane system of maintenance as required by the RECREATIONAL AVIATION AUSTRALIA INC. Technical Manual section 4.2.1.	3	2	1

UNIT: 2. CONTROL AEROPLANE ON THE GROUND

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
2.1 Start and stop engine.			
• Pre-start and after start checks are completed in accordance with flight manual/POH.	3	2	1
• Engine is started and shut down in accordance with flight manual/POH.	3	2	1
• Emergencies are managed in accordance with flight manual/POH.	3	2	1
• Pre-and after shutdown checks are completed in accordance with flight manual/POH.	3	2	1
2.2 Taxi aeroplane.			
• Taxi clearance/call is obtained/broadcast and aeroplane is taxied in accordance with prevailing aerodrome conditions.	3	2	1
• Effects of prevailing conditions are anticipated and allowed for.	3	2	1
• Engine handling on the ground is in accordance with flight manual/POH and propeller care is exercised.	3	2	1
• Approved marshalling signals are utilised	3	2	1

UNIT: 3. TAKE OFF AEROPLANE

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
3.1 Carry out pre-take-off procedures.			
• Pre take-off checks are completed in accordance with approved checklist.	3	2	1
• Aeroplane is lined up in the centre of the runway in take off direction and line up checks are carried out in accordance with approved checklist.	3	2	1
3.2 Take-off aeroplane.			
• Take off power is applied, aeroplane is maintained aligned with centre of runway with wings maintained level and rotated at recommended speed to achieve planned climb performance.	3	2	1
• Aeroplane is configured for nominated climb profile and tracking on centre line of runway is maintained.	3	2	1
3.3 Carry out after take-off procedures.			
• After take-off checks are performed from memory in accordance with approved checklist.	3	2	1

UNIT: 4. CONTROL AEROPLANE IN NORMAL FLIGHT

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
4.1 Climb aeroplane.			
• Attitude and power are adjusted to achieve an increase of altitude at normal, maximum rate, maximum angle and cruise conditions of flight during straight and turning manoeuvres whilst maintaining the aeroplane in balanced flight.	3	2	1
• Aeroplane is levelled off from climb at nominated altitude.	3	2	1
4.2 Maintain straight and level flight.			
• Attitude and power are adjusted to achieve a constant height, heading and speed whilst in balanced flight and at nominated speeds and aeroplane configurations.	3	2	1
4.3 Descend aeroplane.			
• Attitude and power are adjusted to achieve a decrease in altitude during glide, and power assisted flight at a nominated speed or rate of descent during straight and turning flight manoeuvres whilst in different aeroplane configurations and maintaining balanced flight.	3	2	1
• Aeroplane is levelled from a descent at a nominated altitude.	3	2	1
4.4 Turn aeroplane.			
• Airspace cleared procedure is carried out.	3	2	1
• Heading is altered in balanced flight during level, climbing, descending and gliding manoeuvres and turns are performed at varying rates to achieve specified tracks.	3	2	1
• Turn on to nominated heading or geographical feature is achieved.	3	2	1
4.5 Control aeroplane at slow speed.			
• Pre manoeuvre checks are completed.	3	2	1
• Aeroplane is flown at minimum clean approach speed and at minimum landing configuration approach speed as specified in flight manual/POH in balanced flight.	3	2	1
• Full power is applied and attitude and balance adjusted to achieve	3	2	1

nominated speed in excess of 1.1 Vs, whilst maintaining height.			
4.6 Perform circuits and approaches.			
• Traffic patterns are conducted in accordance with AIP procedures appropriate to the aeroplane type with allowance for wind velocity on all legs of the circuit.	3	2	1
• Completing all checklists and radiotelephone procedures and intercepting and maintaining the approach path applicable to the aeroplane type, whilst remaining clear of other traffic with due regard to high performance design.	3	2	1
• When traffic conflict or adverse flight conditions arise, these conditions are recognised and a go around is performed from any position in the traffic pattern.	3	2	1
4.7 Comply with airspace requirements.			
• Aeroplane is maintained within a specified area, whilst complying with air traffic requirements if applicable, restricted airspace conditions or limitations of controlled airspace, if applicable and reacting to factors which affect the safe progress of the flight with due regard to the high performance design.	3	2	1
4.8 Operations in the vicinity of Aerodromes.			
• Operation of the aircraft in the vicinity of aerodromes is consistent with CAR 166 (Operating in the vicinity of a non-controlled aerodrome), 167 (Operation on or in the vicinity of a Controlled aerodrome), 168 (Aerodromes at which the operation of aircraft is not restricted o the runways).	3	2	1
• Separation minima for take off and landing.	3	2	1

UNIT: 5. LAND AEROPLANE

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
5.1 Land Aeroplane.			
• Aeroplane is landed at a controlled rate of descent, aligned with and above the runway centre line, within a specified area, without drift, maintaining directional control, and stopping within the available runway length.	3	2	1
• Ballooning and bouncing are minimised and controlled.	3	2	1
• After landing checks are performed in accordance with approved checklist.	3	2	1
5.2 Perform Miss landing Procedure.			
• Decision to perform miss landing is made when landing standards cannot be achieved.	3	2	1
• Control of aeroplane is maintained and circuit is performed.	3	2	1

UNIT: 6. EXECUTE ADVANCED MANOEUVRES AND PROCEDURES

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
6.1 Recover from stall.			
• Pre-manoeuve checks are completed.	3	2	1
• Aeroplane attitude and power settings are adjusted to resume normal balanced flight on advent of stall.	3	2	1
• Height loss is consistent with aeroplane type with due regard to low drag/higher inertia design.	3	2	1
6.2 Recover from incipient spin.			
• Pre manoeuvre checks are completed.	3	2	1
• Recovery at incipient spin stage (stall with wing drop) is performed and controlled flight is resumed.	3	2	1
• Recovery at incipient spin stage during a turn is performed and controlled flight is resumed with due regard to low drag/higher inertia design.	3	2	1
6.3 Turn aeroplane steeply.			
• Air space cleared procedure is carried out.	3	2	1
• Level turn of nominated bank angle is achieved without altitude change.	3	2	1
• Descending turn of nominated bank angle is achieved to a nominated heading or geographical feature through a minimum of 500 feet height loss.	3	2	1
• Recovery is made from spiral dive with due regard to low drag/higher inertia design.	3	2	1
6.4 Sideslip aeroplane - Pre-manoeuve checks are performed.			
• Slip is induced to achieve increased rate of descent while maintaining track and airspeed without overstressing flap limitations, if applicable.	3	2	1

<ul style="list-style-type: none"> Turn through minimum track change of 90° at constant airspeed using sideslip. 	3	2	1
<ul style="list-style-type: none"> Recovery from sideslip is achieved and aeroplane is returned to balanced flight. 	3	2	1
6.5 Execute short take-off and landing.			
<ul style="list-style-type: none"> Take off performance is calculated in accordance with performance chart. 	3	2	1
<ul style="list-style-type: none"> Pre-take-off checks are performed in accordance with approved checklist. 	3	2	1
<ul style="list-style-type: none"> Aeroplane is lined up to enable use of maximum runway length. 	3	2	1
<ul style="list-style-type: none"> Line up checks are performed in accordance with approved checklist. 	3	2	1
<ul style="list-style-type: none"> Take off power is achieved before brakes are released and aeroplane is rotated at recommended speed, and nominated climb speed appropriate to obstacle clearance requirements is achieved then speed increased to normal climb speed once obstacles are cleared. 	3	2	1
<ul style="list-style-type: none"> After-take-off checks are performed from memory in accordance with approved checklist. 	3	2	1
<ul style="list-style-type: none"> Landing performance is calculated in accordance with performance chart. 	3	2	1
<ul style="list-style-type: none"> Aeroplane is landed at nominated touch down point +200 ft (60 metres) at minimum speed and maximum braking is applied. 	3	2	1
<ul style="list-style-type: none"> Ballooning and bouncing are controlled. 	3	2	1
<ul style="list-style-type: none"> After-landing checks are performed in accordance with approved checklist. 	3	2	1

UNIT: 7. MANAGE ABNORMAL SITUATIONS

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
7.1 Manage engine failure after take-off.			
<ul style="list-style-type: none"> Immediate actions are performed in accordance with flight manual/POH with due regard to low drag/higher inertia design. 	3	2	1
<ul style="list-style-type: none"> A landing area within gliding distance is selected, emergency procedures are performed in accordance with flight manual/POH and the aeroplane is landed with due regard to low drag/high inertia design. 	3	2	1
7.2 Manage engine failure elsewhere in circuit.			
<ul style="list-style-type: none"> Immediate actions are performed in accordance with flight manual/POH with due regard to low drag/higher inertia design. 	3	2	1
<ul style="list-style-type: none"> A landing area within gliding distance, on the aerodrome or elsewhere, is selected. 	3	2	1
<ul style="list-style-type: none"> Emergency procedures are performed in accordance with flight manual/POH and the aeroplane is landed if the engine cannot be restarted. 	3	2	1
7.3 Perform forced landing.			
<ul style="list-style-type: none"> Immediate actions are performed in accordance with flight manual/POH with due regard to low drag/higher inertia design. 	3	2	1
<ul style="list-style-type: none"> Landing area within gliding distance is selected, all emergency checks are performed in accordance with the flight manual/POH, and if an engine restart is not achieved a controlled landing is performed with due regard to low drag/higher inertia design. 	3	2	1
7.4 Conduct precautionary search and landing.			
<ul style="list-style-type: none"> Air Traffic Services are advised of intentions if applicable. 	3	2	1
<ul style="list-style-type: none"> Landing area is selected and inspected for approach, landing distance and surface, and overshoot clearance and aeroplane is landed. 	3	2	1
7.5 Manage abnormal situations.			
<ul style="list-style-type: none"> Abnormal situation involving fuel, electrical, airframe, flight instrument, flight control, engine or radio, fire, smoke, fumes and ditching are identified. 	3	2	1
<ul style="list-style-type: none"> Appropriate emergency procedures are conducted in accordance with flight manual/POH and published procedures while maintaining control of the aeroplane. 	3	2	1

UNIT: 8. MANAGE FUEL

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
8.1 Plan fuel requirements.			
<ul style="list-style-type: none"> Duration of flight is determined. 	3	2	1

• Total fuel requirement is determined.	3	2	1
8.2 Manage fuel system.			
• Fuel system is operated in accordance with flight manual/POH.	3	2	1
• Fuel requirements are revised as circumstances change.	3	2	1
• Aeroplane is configured to achieve best range.	3	2	1
• Aeroplane is configured to achieve best endurance.	3	2	1
8.3 Refuel aeroplane.			
• Aeroplane is refuelled in accordance with flight manual/POH, workplace health & safety and local procedures.	3	2	1

-End of High Performance Syllabus-

RECREATIONAL AVIATION AUSTRALIA Inc.
LOW PERFORMANCE SYLLABUS

For Recreational Aviation Australia registered aircraft with a cruising speed less than 80kts.

UNIT: 1. MANAGE PRE AND POST FLIGHT ACTIONS FLYING STANDARD

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
1.1 Complete pre and post flight administration.			
• Pre-flight planning and documentation is completed in accordance with regulations and/or operations manual.	3	2	1
• Aeroplane take-off and landing performance is calculated in accordance with performance and weight and balance charts if applicable.	3	2	1
• Pre and post flight logbook and flight administration is completed in accordance with tech manual and/or operations manual.	3	2	1
• Aeroplane serviceability is determined by daily inspection, and certification of daily inspection in maintenance logbook is completed in accordance with regulations.	3	2	1
1.2 Perform pre-flight inspection.			
• Equipment and documentation as required by regulation is identified and secured in the aeroplane, and internal and external checks are completed in accordance with approved checklist.	3	2	1
1.3 Perform and certify daily inspection.			
• A daily inspection of aeroplane is performed in accordance with aeroplane system of maintenance as required by the RECREATIONAL AVIATION AUSTRALIA INC. Technical Manual section 4.2.1	3	2	1

UNIT: 2. CONTROL AEROPLANE ON THE GROUND

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
2.1 Start and stop engine.			
• Pre-start and after start checks are completed in accordance with flight manual/POH.	3	2	1
• Engine is started and shut down in accordance with flight manual/POH.	3	2	1
• Emergencies are managed in accordance with flight manual/POH.	3	2	1
• Pre-and after shutdown checks are completed in accordance with flight manual/POH.	3	2	1
2.2 Taxi aeroplane.			
• Taxi clearance/calls are obtained/broadcast and aeroplane is taxied in accordance with prevailing aerodrome conditions.	3	2	1
• Effects of prevailing conditions are anticipated and allowed for.	3	2	1
• Engine handling on the ground is in accordance with flight manual/POH and propeller care is exercised.	3	2	1
• Approved marshalling signals are utilised	3	2	1

UNIT: 3. TAKE OFF AEROPLANE

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
3.1 Carry out pre-take-off procedures.			
• Pre take-off checks are completed in accordance with approved checklist.	3	2	1
• Aeroplane is lined up in the centre of the runway in take off direction and	3	2	1
• Line up checks are carried out in accordance with approved checklist.	3	2	1
3.2 Take-off aeroplane.			
• Take off power is applied, aeroplane is maintained aligned with centre of runway with wings maintained level and rotated at recommended speed to achieve planned climb performance.	3	2	1
• Aeroplane is configured for nominated climb profile and tracking on centre line of runway is maintained.	3	2	1
3.3 Carry out after take-off procedures.			
• After take-off checks are performed from memory in accordance with	3	2	1

approved checklist.			
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UNIT: 4. CONTROL AEROPLANE IN NORMAL

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
4.1 Climb aeroplane.			
<ul style="list-style-type: none"> Attitude and power are adjusted to achieve an increase of altitude at normal, maximum rate, maximum angle and cruise conditions of flight during straight and turning manoeuvres whilst maintaining the aeroplane in balanced flight. Aeroplane is levelled off from climb at nominated altitude. 	3	2	1
4.2 Maintain straight and level flight.			
<ul style="list-style-type: none"> Attitude and power are adjusted to achieve a constant height, heading and speed whilst in balanced flight and at nominated speeds and aeroplane configurations. 	3	2	1
4.3 Descend aeroplane.			
<ul style="list-style-type: none"> Attitude and power are adjusted to achieve a decrease in altitude during glide, and power assisted flight at a nominated speed or rate of descent during straight and turning flight manoeuvres whilst in different aeroplane configurations and maintaining balanced flight. Aeroplane is levelled from a descent at a nominated altitude. 	3	2	1
4.4 Turn aeroplane.			
<ul style="list-style-type: none"> Airspace cleared procedure is carried out. Heading is altered in balanced flight during level, climbing, descending and gliding manoeuvres and turns are performed at varying rates to achieve specified tracks. Turn on to nominated heading or geographical feature is achieved. 	3 3 3	2 2 2	1 1 1
4.5 Control aeroplane at slow speed.			
<ul style="list-style-type: none"> Pre manoeuvre checks are completed. Aeroplane is flown at minimum clean approach speed and at minimum landing configuration approach speed as specified in flight manual/POH in balanced flight. Full power is applied and attitude and balance adjusted to achieve nominated speed in excess of 1.1 Vs, whilst maintaining height. 	3 3 3	2 2 2	1 1 1
4.6 Perform circuits and approaches.			
<ul style="list-style-type: none"> Traffic patterns are conducted in accordance with AIP procedures appropriate to the aeroplane type with allowance for wind velocity on all legs of the circuit. Completing all checklists and radiotelephone procedures and intercepting and maintaining the approach path applicable to the aeroplane type, whilst remaining clear of other traffic with due regard to low performance design. When traffic conflict or adverse flight conditions arise, these conditions are recognised and a go around is performed from any position in the traffic pattern. 	3 3 3	2 2 2	1 1 1
4.7 Comply with airspace requirements.			
<ul style="list-style-type: none"> Aeroplane is maintained within a specified area, whilst complying with air traffic requirements, restricted airspace conditions or limitations of controlled airspace and reacting to factors which affect the safe progress of the flight with due regard to the low performance design. 	3	2	1

UNIT: 5. LAND AEROPLANE

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
5.1 Land aeroplane.			
<ul style="list-style-type: none"> Aeroplane is landed at a controlled rate of descent, aligned with and above the runway centreline, within a specified area, without drift, maintaining directional control, and stopping within the available runway length. Ballooning and bouncing are minimised and controlled. After landing checks are performed in accordance with approved checklist. 	3 3 3	2 2 2	1 1 1
5.2 Perform miss landing procedure.			
<ul style="list-style-type: none"> Decision to perform miss landing is made when landing standards cannot be achieved. Control of aeroplane is maintained and circuit is performed. 	3 3	2 2	1 1

UNIT: 6. EXECUTE ADVANCED MANOEUVRES AND PROCEDURES

Flying Standard	Before Solo	Pilot Certificate	Inst Rating

6.1 Recover from stall.			
• Pre-maneuvre checks are completed.	3	2	1
• Aeroplane attitude and power settings are adjusted to resume normal balanced flight on advent of stall.	3	2	1
• Height loss is consistent with aeroplane type with due regard to high drag/low inertia design.	3	2	1
6.2 Recover from incipient spin.			
• Pre manoeuvre checks are completed.	3	2	1
• Recovery at incipient spin stage (stall with wing drop) is performed and controlled flight is resumed.	3	2	1
• Recovery at incipient spin stage during a turn is performed and controlled flight is resumed with due regard to high drag/low inertia design.	3	2	1
6.3 Turn aeroplane steeply.			
• Air space cleared procedure is carried out.	3	2	1
• Level turn of nominated bank angle is achieved without altitude change.	3	2	1
• Descending turn of nominated bank angle is achieved to a nominated heading or geographical feature through a minimum of 500 feet height loss.	3	2	1
• Recovery is made from spiral dive with due regard to high drag/low inertia design.	3	2	1
6.4 Sideslip aeroplane - Pre-maneuvre checks are performed.			
• Slip is induced to achieve increased rate of descent while maintaining track and airspeed with out overstressing flap limitations if applicable.	3	2	1
• Turn through minimum track change of 90° at constant airspeed using sideslip.	3	2	1
• Recovery from sideslip is achieved and aeroplane is returned to balanced flight.	3	2	1
6.5 Execute short take-off and landing.			
• Take off performance is calculated in accordance with performance chart.	3	2	1
• Pre-take-off checks are performed in accordance with approved checklist.	3	2	1
• Aeroplane is lined up to enable use of maximum runway length available	3	2	1
• Line up checks are performed in accordance with approved checklist.	3	2	1
• Take off power is achieved before brakes (where fitted) are released and aeroplane is rotated at recommended speed, and nominated climb speed appropriate to obstacle clearance requirements is achieved.	4	2	1
• After-take-off checks are performed from memory in accordance with approved checklist.	3	2	1
• Landing performance is calculated in accordance with performance chart.	4	2	1
• Aeroplane is landed at nominated touch down point +200 ft (60 metres) at minimum speed and maximum braking is applied.	4	2	1
• Ballooning and bouncing are controlled.	3	2	1
• After-landing checks are performed in accordance with approved checklist.	3	2	1

UNIT: 7. MANAGE ABNORMAL SITUATIONS

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
7.1 Manage engine failure after take-off.			
• Immediate actions are performed in accordance with flight manual/POH with due regard to high drag/low inertia design.	3	2	1
• A landing area within gliding distance is selected, emergency procedures are performed in accordance with flight manual/POH and the aeroplane is landed with due regard to high drag/low inertia design.	3	2	1
7.2 Manage engine failure elsewhere in circuit.			
• Immediate actions are performed in accordance with flight manual/POH with due regard to high drag/low inertia design.	3	2	1
• A landing area within gliding distance, on the aerodrome or elsewhere, is selected.	3	2	1
• Emergency procedures are performed in accordance with flight manual/POH and the aeroplane is landed if the engine cannot be restarted.	3	2	1
7.3 Perform forced landing			
• Immediate actions are performed in accordance with flight	3	2	1

<ul style="list-style-type: none"> manual/POH with due regard to high drag/low inertia design. Landing area within gliding distance is selected, all emergency checks are performed in accordance with the flight manual/POH, and if an engine restart is not achieved a controlled landing is performed with due regard to high drag/low inertia design. 	3	2	1
7.4 Conduct precautionary search and landing			
<ul style="list-style-type: none"> Air Traffic Services are advised of intentions if possible or applicable. Landing area is selected and inspected for approach, landing distance and surface, and overshoot clearance and aeroplane is landed. 	3	2	1
	3	2	1
7.5 Manage abnormal situations			
<ul style="list-style-type: none"> Abnormal situation involving fuel, electrical, airframe, flight instrument, flight control, engine or radio, fire, smoke, fumes and ditching are identified. Appropriate emergency procedures are conducted in accordance with flight manual/POH and published procedures while maintaining control of the aeroplane. 	3	2	1
	3	2	1

UNIT: 8. MANAGE FUEL

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
8.1 Plan fuel requirements.			
<ul style="list-style-type: none"> Duration of flight is determined. Total fuel requirement is determined. 	3	2	1
	3	2	1
8.2 Manage fuel system.			
<ul style="list-style-type: none"> Fuel system is operated in accordance with flight manual/POH. Fuel requirements are revised as circumstances change. Aeroplane is configured to achieve best range. Aeroplane is configured to achieve best endurance. 	3	2	1
	3	2	1
	3	2	1
	3	2	1
8.3 Refuel aeroplane.			
<ul style="list-style-type: none"> Aeroplane is refuelled in accordance with flight manual/POH, workplace health & safety and local procedures. 	3	2	1

-End of Low Performance Syllabus-

RECREATIONAL AVIATION AUSTRALIA INC.
WEIGHT SHIFT PILOT CERTIFICATE SYLLABUS

UNIT 1. THE AIRCRAFT (Daily Inspection)

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
1.1 Complete Pre & Post Flight Administration.			
• Flight briefing and planning according to current regulations and Recreational Aviation Australia Inc. Operations Manual.	3	2	1
• Aircraft performance and loading limitations calculated using the Flight Manual/POH.	3	2	1
• Aircraft maintenance serviceability determined.	3	2	1
1.2 Perform Daily and Pre Flight Inspection.			
• Wing examination conducted as per approved checklist.	3	2	1
• Trike examination conducted as per approved checklist.	3	2	1
1.3 Certify Daily Inspection.			
• Record and certify required details of daily inspection in accordance with regulations.	3	2	1

UNIT 2. THE CONTROLS

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
Flight Controls.			
2.1 Pitch.			
• Pitch control achieved by moving control bar outwards and inwards.	3	2	1
2.2 Roll.			
• Roll control achieved by moving control bar sideways.	3	2	1
2.3 Trim.			
• Trim control achieved by use of trim mechanism (if fitted).	3	2	1
Engine Controls.			
2.4 Master / Ignition.			
• Operation of master switch, ignition switch/s, starter system.	3	2	1
2.5 Throttle.			
• Operation of foot and hand throttle to increase and decrease engine power.	3	2	1
2.6 Fuel Supply.			
• Operation of aircraft fuel containment tank/s, fuel delivery system to engine, quantity indicator/s, auxiliary fuel pump/s, fuel flow indicators, refuelling procedures	3	2	1
2.7 Start and Stop Engine.			
• Pre start checks are completed and engine is started in accordance with Flight Manual/POH.	3	2	1
• After start checks are completed in accordance with Flight Manual/POH	3	2	1
• Emergencies are managed in accordance with Flight Manual/POH	3	2	1
• Pre and after shutdown checks are completed in accordance with Flight Manual/POH	3	2	1
Ground Controls.			
2.8 Taxiing.			
• Steering is accomplished by the use of feet on nose wheel steering mechanism (billy cart style).	3	2	1
• Forward movement is accomplished by use of engine power (thrust).	3	2	1
• Brakes are used to arrest or control forward movement.	3	2	1
• Wing controls (pitch and roll) are used to assist in directional control, aircraft safety and pilot visibility.	3	2	1

UNIT 3. INSTRUMENTS

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
3.1 Engine Management Instruments.			
• Identification, understanding, operation and monitoring of all engine instrumentation.	3	2	1
3.2 Fuel Management Instruments.			
• Identification, understanding, operation and monitoring of fuel management instruments.	3	2	1

3.3 Flight Instruments.			
• Identification, understanding, operation and monitoring of aircraft flight instruments.	3	2	1

UNIT 4. FUEL SYSTEM, USE AND MANAGEMENT

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
4.1 Fuel System.			
• Components of fuel system.	3	2	1
4.2 Plan Fuel Requirements.			
• Duration of flight determined.	3	2	1
• Fuel reserves determined.	3	2	1
• Total fuel requirement determined.	3	2	1
4.3 Refuel Aircraft			
• Aircraft is refuelled in accordance with Flight Manual/POH, health and safety and local requirements.	3	2	1

UNIT 5. TAXIING

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
5.1 Taxi Aircraft.			
• Steering is accomplished by the use of feet on nose wheel steering mechanism (billy cart style).	3	2	1
• Forward movement is accomplished by use of engine power (thrust).	3	2	1
• Brakes are used to arrest or control forward movement.	3	2	1
• Wing controls (pitch and roll) are used to assist in directional control, aircraft safety and pilot visibility.	3	2	1

UNIT 6. CARRY OUT PRE TAKE OFF CHECKS

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
6.1 Carry out Pre Take Off checks.			
• Stop at Holding Point and perform Pre Take Off checks.	3	2	1

UNIT 7. TAKEOFF AIRCRAFT

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
7.1 Line Up Aircraft.			
• Aircraft lined up in the centre of the runway in take off direction and line up checks carried out.	3	2	1
7.2 Take Off.			
• Take off power is applied, aircraft direction on runway centre is maintained and lift off established at manufacturers recommended airspeed.	3	2	1
• Climb, airspeed and takeoff direction maintained as required.	3	2	1
7.3 Perform After Take off checks.			
• After Take Off checks performed.	3	2	1
7.4 Short Field Take Off.			
• Perform a short field take off.	3	2	1

UNIT 8. STRAIGHT AND LEVEL FLIGHT

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
8.1 Maintain Straight and Level Flight.			
• Attitude and power are adjusted to achieve a constant height, heading and airspeed and other nominated airspeeds.	3	2	1

UNIT 9. CLIMBING AND DESCENDING

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
9.1 Climbing.			

<ul style="list-style-type: none"> Power, attitude and trim are adjusted to achieve an increase in altitude at a range of rates of climb (maximum climb, cruise climb and gentle climb) 	3	2	1
<ul style="list-style-type: none"> Aircraft is levelled off from climb at a nominated altitude. 	3	2	1
9.2 Descending.			
<ul style="list-style-type: none"> Attitude, power and trim are adjusted to achieve a decrease in altitude at a range of rates (from glide/idle descent through to powered descent). 	3	2	1
<ul style="list-style-type: none"> Aircraft is levelled off from descent at nominated altitude. 	3	2	1

UNIT 10. TURNING FLIGHT < 45 DEGREES ANGLE OF BANK

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
10.1 Level, climbing and descending turns.			
<ul style="list-style-type: none"> Clear Airspace procedure carried out. 	3	2	1
<ul style="list-style-type: none"> Aircraft is turned during level, climbing, descending and gliding manoeuvres. 	3	2	1
<ul style="list-style-type: none"> Turns are performed at varying angles of bank. 	3	2	1
<ul style="list-style-type: none"> Turn to a nominated heading or geographical feature is achieved. 	3	2	1

UNIT 11. SLOW FLIGHT

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
11.1 Fly and control aircraft at slow speed.			
<ul style="list-style-type: none"> Aircraft is flown a variety of specified flight procedures at minimum approach speed as specified in Flight Manual/POH. 	3	2	1
<ul style="list-style-type: none"> Resume normal cruise speed. 	3	2	1

UNIT 12. STALL ENTRY AND RECOVERY.

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
12.1 Approach stall.			
<ul style="list-style-type: none"> Pre manoeuvre checks completed. 	3	2	1
<ul style="list-style-type: none"> Aircraft configured and flown to reduce IAS. 	3	2	1
12.2 Stall entry.			
<ul style="list-style-type: none"> Aircraft flown to enter stalled condition. 	3	2	1
12.3 Stall recovery.			
<ul style="list-style-type: none"> Aircraft attitude and power settings adjusted to recover from stall and resume normal flight. 	3	2	1
12.4 Stall recovery while turning.			
<ul style="list-style-type: none"> Aircraft attitude and power settings adjusted to recover from stall and resume normal flight 	3	2	1

UNIT 13. ENGINE FAILURE ON TAKEOFF.

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
13.1 Manage engine failure on take off.			
<ul style="list-style-type: none"> Immediate actions are performed in accordance with Flight Manual/POH. 	3	2	1
<ul style="list-style-type: none"> A landing area is selected within gliding distance, emergency procedures are performed in accordance with the Flight Manual/POH. 	3	2	1
<ul style="list-style-type: none"> The aircraft is landed. 	3	2	1

UNIT 14. ENGINE FAILURE IN CIRCUIT (GLIDE APPROACH)

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
14.1 Manage engine failure on crosswind, downwind, base and final circuit legs.			
<ul style="list-style-type: none"> Immediate actions are performed in accordance with Flight Manual/POH. 	3	2	1
<ul style="list-style-type: none"> The most suitable landing area within gliding distance is selected. 	3	2	1
<ul style="list-style-type: none"> Emergency procedures are performed according to Flight Manual/POH. 	3	2	1
<ul style="list-style-type: none"> The aircraft is landed. 	3	2	1

UNIT 15. CIRCUITS

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
15.1 Perform circuits and approach for landing.			
• Circuit air traffic patterns are conducted in accordance with AIP/ERSA/Recreational Aviation Australia Inc. and local approved procedures.	3	2	1
• Circuit checklists are carried out in accordance with Flight Manual/POH and approved training procedures.	3	2	1
• Circuit radio procedures carried out in accordance with AIP/ERSA/Recreational Aviation Australia Inc. and local approved procedures.	3	2	1
• Conflict with other traffic in the circuit area is avoided.	3	2	1

UNIT 16. LANDING

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
16.1 Normal landing.			
• Aircraft is landed from a controlled descent and aligned with the runway centreline.	3	2	1
• Aircraft is landed into wind.	3	2	1
• Ballooning and bouncing controlled.	3	2	1
• Directional control is maintained during landing and roll out phase.	3	2	1
• Aircraft is stopped within the available runway length or a touch and go manoeuvre is initiated.	3	2	1
• After landing checks completed.	3	2	1
16.2 Cross wind landing.			
• Aircraft landed within the cross wind and pilot capabilities.	3	2	1
• Ballooning and bouncing controlled.	3	2	1
• Aircraft is landed from a controlled descent and aligned with the runway centreline.	3	2	1
• Drift and cross wind effect are controlled. Aircraft is stopped within the available runway length or a touch and go manoeuvre is initiated.	3	2	1
• After landing checks completed.	3	2	1
16.3 Short field landing.			
• Aircraft is landed at or within 50 metres of a nominated touchdown point.	4	2	1
• Maximum braking applied to stop aircraft (without wheel lockup)	4	2	1
• Directional control maintained.	4	2	1
• Ballooning and bouncing controlled.	3	2	1
16.4 Soft field landing.			
• Aircraft is landed at or within 50 metres of a nominated touchdown point using soft field landing technique.	4	2	1
• Braking used as required.	4	2	1
• Directional control maintained.	4	2	1
• Ballooning and bouncing controlled.	3	2	1

UNIT 17. MISSED APPROACH AND GO AROUND

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
17.1 Missed Approach and Go Around.			
• Decision to perform a missed approach procedure is made when a safe landing cannot be achieved.	3	2	1
• Aircraft control is maintained and a circuit is performed.	3	2	1

18. FIRST SOLO CIRCUIT

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
18.1 Perform solo flight circuit.			
• Fly at least one circuit and conduct a full stop landing.	3	/	/

UNIT 19. STEEP TURNS

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
19.1 Steep Turns >45° Angle Of Bank .			
• Airspace is cleared prior to turn.	3	2	1
• Level turn at a nominated angle of bank is achieved without altitude	3	2	1

change.			
19.2 Steep descending turns.			
• Descending turn at a nominated angle of bank (> 45°) to a nominated heading or geographical feature is achieved.	3	2	1
19.3 Spiral dive recovery.			
• Recovery from a spiral dive is made.	3	2	1
19.4 Stall in a steep turn.			
• Recover from a stall during a steep turn.	3	2	1

UNIT 20. FORCED LANDING

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
20.1 Perform a Forced Landing.			
• Immediate actions are performed in accordance with Flight Manual/POH.	3	2	1
• A suitable landing area is selected within gliding distance, all emergency checks are carried out in accordance with the Flight manual/POH and if engine restart is not successful, a controlled landing is achieved.	3	2	1

UNIT 21. MANAGE ABNORMAL SITUATIONS

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
21.1 Recover from Unusual Attitude flight.			
• Return aircraft to normal flight after experiencing unusual attitude flight.	3	2	1
21.2 Manage In-Flight Abnormal Situations.			
• Abnormal situations occurring with fuel, electrical, airframe, flight instrument, flight control, engine, navigation, communication equipment, passenger, fire, smoke or fumes are identified.	3	2	1
• Appropriate emergency action and procedures are carried out in accordance with Flight manual/POH while maintaining control of the aircraft.	3	2	1

UNIT 22. PRECAUTIONARY SEARCH AND LANDING

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
22.1 Conduct Precautionary Search and landing.			
• Acknowledgement of need to conduct a precautionary search and landing.	3	2	1
• Radio Broadcast advice of intentions.	3	2	1
• A landing area is selected and inspected for suitable approach, landing distance, surface, and overshoot clearance.	3	2	1
• The aircraft is landed.	3	2	1

UNIT 23. FIRST TRAINING AREA SOLO

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
23.1 Perform solo flight in Training Area			
• Fly for a defined time and perform defined manoeuvres in the training area.	3	2	1
• Return to airfield and perform a full stop landing.	3	2	1

End of Weightshift Syllabus

RECREATIONAL AVIATION AUSTRALIA INC.
POWERED PARACHUTE PILOT CERTIFICATE SYLLABUS

UNIT 1. THE AIRCRAFT(Daily inspection).

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
1.1 Complete pre & post flight administration.			
• Flight briefing and planning according to current regulations and Recreational Aviation Australia Inc. Operations Manual.	3	2	1
• Aircraft performance and loading limitations calculated using the flight manual/POH.	3	2	1
• Aircraft maintenance serviceability determined.	3	2	1
1.2 Perform daily and pre flight inspection.			
• Canopy examination conducted as per approved checklist.	3	2	1
• Base examination conducted as per approved checklist.	3	2	1
1.3 Certify daily inspection.			
• Record and certify required details of daily inspection in accordance with regulations.	3	2	1

UNIT 2. THE CONTROLS.

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
Flight controls.			
2.1 Pitch.			
• Pitch control achieved by power application/reduction.	3	2	1
2.2 Yaw.			
• Yaw control achieved by flaring canopy in the direction of turn.	3	2	1
Engine Controls.			
2.3 Master / Ignition.			
• Operation of master switch, ignition switch/s, starter system.	3	2	1
2.4 Throttle.			
• Operation of Throttle to increase and decrease engine power.	3	2	1
2.5 Fuel supply.			
• Operation of aircraft fuel containment tank/s, fuel delivery system to engine, quantity indicator/s, auxiliary fuel pump/s, fuel flow indicators, refuelling procedures.	3	2	1
2.6 Start and stop engine.			
• Pre start warm up checks are completed and engine is started in accordance with flight manual/POH.	3	2	1
• After start warm up checks are completed in accordance with flight manual/POH	3	2	1
• Emergencies are managed in accordance with flight manual/POH	3	2	1
• Pre and after shutdown checks are completed in accordance with flight manual/POH.	3	2	1

UNIT 3. INSTRUMENTS.

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
3.1 Engine management instruments.			
• Identification, understanding, operation and monitoring of all engine instrumentation.	3	2	1
3.2 Fuel management instruments.			
• Identification, understanding, operation and monitoring of fuel management instruments.	3	2	1
3.3 Flight instruments.			
• Identification, understanding, operation and monitoring of aircraft flight instruments.	3	2	1

UNIT 4. FUEL SYSTEM, USE AND MANAGEMENT.

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
4.1 Fuel system.			
• Components of fuel system.	3	2	1
4.2 Plan fuel requirements.			
• Duration of flight determined.	3	2	1
• Fuel reserves determined.	3	2	1

• Total fuel requirement determined.	3	2	1
4.3 Refuel aircraft.			
• Aircraft is refuelled in accordance with flight manual/POH, health and safety and local requirements.	3	2	1

UNIT 5. TAXIING.

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
5.1 Taxi aircraft.			
• Ground control (fixed or steerable steering)	3	2	1
• Forward movement is accomplished by use of engine power (thrust).	3	2	1
• Brakes are used to arrest or control forward movement.			
• Canopy controls are used to assist in directional control, and canopy position.	3 3	2 2	1 1

UNIT 6. ENGINE WARM UP AND CARRY OUT PRE TAKE OFF CHECKS.

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
6.1 Carry out Pre Take Off checks.			
• Engine warm up and perform pre take off checks on trike base.	3	2	1

UNIT 7. TAKE OFF AIRCRAFT.

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
7.1 Line up aircraft.			
• Aircraft lined up in the centre of the runway in take off direction and line up checks carried out.	3	2	1
• Preparation of canopy on ground for inflation.	3	2	1
7.2 Canopy transition.			
• Canopy inflation.	3	2	1
• Canopy transition from ground to flying position.	3	2	1
• Pre take off checks on canopy.	3	2	1
7.3 Take off.			
• Take off power is applied, aircraft direction on runway centre is maintained, canopy position observed and lift off established at manufacturers recommended airspeed.	3	2	1
• Climb, airspeed and take off direction maintained as required.	3	2	1
7.4 Perform after take off checks.			
• After take off checks performed.	3	2	1
7.5 Short field take off.			
• Perform a short field take off.	3	2	1

UNIT 8. STRAIGHT AND LEVEL FLIGHT.

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
8.1 Maintain straight and level flight.			
• Power is adjusted to achieve a constant height, heading and airspeed.	3	2	1

UNIT 9. CLIMBING AND DESCENDING.

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
9.1 Climbing.			
• Power is adjusted to achieve an increase in altitude at a range of rates of climb (maximum climb, cruise climb and gentle climb)	3	2	1
• Aircraft is levelled off from climb at a nominated altitude.	3	2	1
9.2 Descending.			
• Power is adjusted to achieve a decrease in altitude at a range of rates (from glide/idle descent through to powered descent).	3	2	1
• Aircraft is levelled off from descent at nominated altitude.	3	2	1

UNIT 10. TURNING FLIGHT.

Flying Standard	Before Solo	Pilot Certificate	Inst Rating

10.1 Level, climbing and descending turns.			
• Clear airspace procedure carried out.	3	2	1
• Aircraft is turned during level, climbing, descending and gliding manoeuvres.	3	2	1
• Turns are performed at varying angles of bank.	3	2	1
• Turn to a nominated heading or geographical feature is achieved.	3	2	1

UNIT 11. CANOPY STALL RECOVERY PROCEDURES.

Intentional canopy stalling not permitted, recovery procedures to be practiced.

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
12.1 Canopy stall.			
• Verbally explain canopy stall and causal factors.	3	2	1
• Practically demonstrate canopy stall recovery actions.	3	2	1
12.2 Canopy collapse.			
• Verbally explain canopy collapse and causal factors.	3	2	1
• Practically demonstrate canopy collapse recovery actions.	3	2	1

UNIT 13. ENGINE FAILURE ON TAKEOFF.

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
13.1 Manage engine failure on take off.			
• Immediate actions are performed in accordance with flight manual/POH.	3	2	1
• A landing area is selected within gliding distance, emergency procedures are performed in accordance with the flight manual/POH.	3	2	1
• The aircraft is landed.	3	2	1

UNIT 14. ENGINE FAILURE IN CIRCUIT (GLIDE APPROACH).

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
14.1 Manage engine failure on crosswind, downwind, base and final circuit legs.			
• Immediate actions are performed in accordance with flight manual/POH.	3	2	1
• The most suitable landing area within gliding distance is selected.	3	2	1
• Emergency procedures are performed according to Flight Manual/POH.	3	2	1
• The aircraft is landed.	3	2	1

UNIT 15. CIRCUITS.

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
15.1 Perform circuits and approach for landing.			
• Circuit air traffic patterns are conducted in accordance with AIP/ERSA/Recreational Aviation Australia Inc. and local approved procedures.	3	2	1
• Circuit checklists are carried out in accordance with flight manual/POH and approved training procedures.	3	2	1
• Circuit radio procedures carried out in accordance with AIP/ERSA/Recreational Aviation Australia Inc. and local approved procedures.	3	2	1
• Conflict with other traffic in the circuit area is avoided.	3	2	1

UNIT 16. LANDING.

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
16.1 Normal landing.			
• Aircraft is landed from a controlled descent and aligned with the runway centre line.	3	2	1
• Aircraft is landed into wind.	3	2	1
• Ballooning and bouncing controlled.	3	2	1
• Directional control is maintained during landing and roll out phase.	3	2	1
• Aircraft is stopped within the available runway length or a touch and go manoeuvre is initiated.	3	2	1
• After landing checks completed.	3	2	1

16.2 Cross wind landing.			
• Aircraft landed within the cross wind and pilot capabilities.	3	2	1
• Ballooning and bouncing controlled.	3	2	1
• Aircraft is landed from a controlled descent and aligned with the runway centre line.	3	2	1
• Drift and crosswind effect are controlled. Aircraft is stopped within the available runway length or a touch and go manoeuvre is initiated.	3	2	1
• After landing checks completed.	3	2	1
16.3 Short field landing.			
• Aircraft is landed at or within 20 metres of a nominated touchdown point.	4	2	1
• Maximum braking applied to stop aircraft (without wheel lockup).	4	2	1
• Directional control maintained.	4	2	1
• Ballooning and bouncing controlled.	3	2	1
• Full stop landing, canopy deflation, engine shutdown.	3	2	1
16.4 Soft field landing.			
• Aircraft is landed at or within 20 metres of a nominated touchdown point using soft field landing technique.	4	2	1
• Braking used as required.	4	2	1
• Directional control maintained.	4	2	1
• Ballooning and bouncing controlled.	3	2	1

UNIT 17. MISSED APPROACH AND GO AROUND.

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
17.1 Missed approach and go around.			
• Decision to perform a missed approach procedure is made when a safe landing cannot be achieved.	3	2	1
• Aircraft control is maintained and a circuit is performed.	3	2	1

19. FIRST SOLO CIRCUIT.

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
18.1 Perform solo flight circuit.			
• Fly at least one circuit and conduct a full stop landing.	3	/	/

UNIT 19. FORCED LANDING

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
19.1 Perform a forced landing on take off.			
• Immediate actions are performed in accordance with flight manual/POH.	3	2	1
• A suitable landing area is selected within gliding distance, all emergency checks are carried out in accordance with the flight manual/POH and if engine restart is not successful, a controlled landing is achieved.	3	2	1
19.2 Perform a forced landing in the circuit.			
• Immediate actions are performed in accordance with flight manual/POH.	3	2	1
• A suitable landing area is selected within gliding distance, all emergency checks are carried out in accordance with the flight manual/POH and if engine restart is not successful, a controlled landing is achieved.	3	2	1
19.3 Perform a forced landing in training area.			
• Immediate actions are performed in accordance with flight manual/POH.	3	2	1
• A suitable landing area is selected within gliding distance, all emergency checks are carried out in accordance with the flight manual/POH and if engine restart is not successful, a controlled landing is achieved.	3	2	1

UNIT 20. MANAGE ABNORMAL SITUATIONS.

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
20.1 Canopy cell blow out			
• Return aircraft to normal flight attitude and effect a simulated forced	3	2	1

landing keeping the aircraft under control.			
20.2 Steering line failure			
<ul style="list-style-type: none"> Return aircraft to normal flight attitude and effect a simulated forced landing keeping the aircraft under control. 	3	2	1
20.3 Manage in-flight abnormal situations			
<ul style="list-style-type: none"> Abnormal situations occurring with fuel, electrical, airframe, flight instrument, flight control, engine, navigation, communication equipment, passenger, fire, smoke or fumes are identified. 	3	2	1
<ul style="list-style-type: none"> Appropriate emergency action and procedures are carried out in accordance with Flight manual/POH while maintaining control of the aircraft. 	3	2	1

UNIT 21. PRECAUTIONARY SEARCH AND LANDING.

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
21.1 Conduct precautionary search and landing.			
<ul style="list-style-type: none"> Acknowledgement of need to conduct a precautionary search and landing. 	3	2	1
<ul style="list-style-type: none"> Radio broadcast advice of intentions. 	3	2	1
<ul style="list-style-type: none"> A landing area is selected and inspected for suitable approach, landing distance, surface, and overshoot clearance. 	3	2	1
<ul style="list-style-type: none"> The aircraft is landed. 	3	2	1

UNIT 22. FIRST TRAINING AREA SOLO.

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
22.1 Perform solo flight in training area.			
<ul style="list-style-type: none"> Fly for a defined time and perform defined manoeuvres in the training area. 	3	2	1
<ul style="list-style-type: none"> Return to airfield and perform a full stop landing. 	3	2	1

End of Powered Parachute Syllabus.

RECREATIONAL AVIATION AUSTRALIA Inc.
LOW LEVEL SYLLABUS

UNIT: 1. LEGAL REQUIREMENTS

Flying Standard	Pilot Certificate	Inst Rating
1.1 RA-Aus Operations manual.		
<ul style="list-style-type: none"> Pilot demonstrates knowledge of the legal requirements in regard to low flight. 	2	1
1.2 CAR 157.		
<ul style="list-style-type: none"> Pilot demonstrates knowledge of the legal requirements in regard to low flight. 	2	1

UNIT: 2. AIRCRAFT HANDLING

Flying Standard	Pilot Certificate	Inst Rating
2.1 General Aircraft handling at altitude.		
<ul style="list-style-type: none"> Level turns up to 60 degrees angle of bank. Climbing turns up to and including 60 degrees angle of bank. Descending turns up to and including 60 degree angle of bank. 	2 2 2	1 1 1
2.2 Stall symptoms and recovery at altitude.		
<ul style="list-style-type: none"> Stall symptom recognition and recovery straight and level. Stall symptom recognition and recovery up to 60 degree angle of bank. 	2 2	1 1
2.3 Advanced manoeuvres at altitude.		
<ul style="list-style-type: none"> Slow flight. Use of flaps and effects of changing flap setting in flight. Methods of losing height. Manoeuvring at varying airspeeds and angle of bank. Visual Lookout and scan technique. 	2 2 2 2 2	1 1 1 1 1

UNIT: 3 FACTORS AFFECTING LOW FLIGHT

Flying Standard	Pilot Certificate	Inst Rating
3.1 The effects of wind.		
<ul style="list-style-type: none"> Turning to downwind. Maintaining balance. Power control. Drift control. Wind gradient. Effect of wind circulating over undulating country. 	2 2 2 2 2 2	1 1 1 1 1 1
3.2 The effects of turbulence.		
<ul style="list-style-type: none"> Mechanical turbulence. Convection Turbulence. 	2 2	1 1
3.3 Lookout.		
<ul style="list-style-type: none"> Scan technique used. Lookout conducted before turns with regard to obstacles. 	2 2	1 1
3.4 Powerlines.		
<ul style="list-style-type: none"> Visual identification from the air. Types of powerlines. 	2 2	1 1
3.5 Bird Behaviour.		
<ul style="list-style-type: none"> Individual. Flocks of Birds. 	2 2	1 1

UNIT: 4. LOW FLYING

Flying Standard	Pilot Certificate	Inst Rating
4.1 Low level flight over flat terrain.		
<ul style="list-style-type: none"> Use of power. Use of airspeed. Use of trim. Lookout and scan techniques. Recognition of height at low level. False horizons. 	2 2 2 2 2 2	1 1 1 1 1 1
4.2 Low level flight over undulating terrain.		
<ul style="list-style-type: none"> Anticipating the change in airspeed and power required. 	2	1

• Recognition of anticipation at higher aircraft weights.	2	1
• Assessment of the wind.	2	1
4.3 Low level medium turns.		
• Lookout with reference to changing contours, obstructions and bird strike.	2	1
• Use of power.	2	1
• Aircraft balance.	2	1
• Wind drift.	2	1
• Consistent Height.	2	1
4.4 Low level steep turns.		
• Lookout.	2	1
• Use of power.	2	1
• Aircraft Balance.	2	1
• Wind drift.	2	1
• Consistent Height.	2	1
4.5 Max rate turns at MTOW.		
• Effects on stall and recovery at symptoms of stall.	2	1
• Use of power.	2	1
• Maintain height with constant nose attitude.	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	
• Use of trim.	2	1
4.7 Methods of losing height.		
• Use of flap and power.	2	1
• Use of sideslip.	2	1
4.8 Emergency procedures.		
• Engine Failure at low level.	2	1
• Bird strike immediate actions.	2	1
• Loss of visual reference.	2	1

End of Low Level Syllabus

RECREATIONAL AVIATION AUSTRALIA Inc.
FORMATION SYLLABUS

UNIT: 1. AIRMANSHIP

FLYING STANDARD	Pilot Certificate	Inst Rating
Airmanship considerations		
<ul style="list-style-type: none"> Understand all RA-Aus operational requirements with regard to formation flight as detailed in the operations manual. 	2	1
<ul style="list-style-type: none"> Understand noise abatement procedures in relation to formation as per the operations manual. 	2	1
<ul style="list-style-type: none"> Suitability of aircraft considerations. 	2	1

UNIT: 2. FLYING LEAD

FLYING STANDARD	Pilot Certificate	Inst Rating
Brief and lead a formation.		
<ul style="list-style-type: none"> Briefing. 	2	1
<ul style="list-style-type: none"> Leadership responsibilities. 	2	1
<ul style="list-style-type: none"> Planning and execution. 	2	1
<ul style="list-style-type: none"> Mixed Aircraft types. 	2	1
<ul style="list-style-type: none"> Communications. 	2	1
<ul style="list-style-type: none"> Hand Signals 	2	1
<ul style="list-style-type: none"> Start up. 	2	1
<ul style="list-style-type: none"> Taxying. 	2	1
<ul style="list-style-type: none"> Take off. 	2	1
<ul style="list-style-type: none"> Forming up. 	2	1
<ul style="list-style-type: none"> Emergency procedures. 	2	1
<ul style="list-style-type: none"> Collision actions. 	2	1
<ul style="list-style-type: none"> Loss of contact actions. 	2	1
<ul style="list-style-type: none"> Relinquish Lead. 	2	1

UNIT: 3. FLYING WINGMAN

FLYING STANDARD	Pilot Certificate	Inst Rating
Maintain station while taxiing.		
<ul style="list-style-type: none"> Line Astern. 	2	1
<ul style="list-style-type: none"> Echelon right or left. 	2	1
Stream Take off.		
<ul style="list-style-type: none"> Line Astern. 	2	1
<ul style="list-style-type: none"> Echelon right or left. 	2	1
Maintain station in flight.		
<ul style="list-style-type: none"> Line Astern. 	2	1
<ul style="list-style-type: none"> Echelon left. 	2	1
<ul style="list-style-type: none"> Echelon Right. 	2	1
<ul style="list-style-type: none"> Line Abreast. 	2	1
Conduct join up and breakaway manoeuvres.		
<ul style="list-style-type: none"> Straight rejoin. 	2	1
<ul style="list-style-type: none"> Turning rejoin away. 	2	1
<ul style="list-style-type: none"> Turning rejoin towards. 	2	1
<ul style="list-style-type: none"> Breakaway. 	2	1
<ul style="list-style-type: none"> Initial and Pitch 	2	1
Formation signals.		
<ul style="list-style-type: none"> Interpret standard formation hand signals. 	2	1
<ul style="list-style-type: none"> Interpret standard formation radio signals. 	2	1
Change of leader.		
<ul style="list-style-type: none"> Change of leader procedure. 	2	1
Approach and landing.		
<ul style="list-style-type: none"> Initial and pitch. 	2	1
<ul style="list-style-type: none"> Stream landing. 	2	1
<ul style="list-style-type: none"> Pairs landing. 	2	1
<ul style="list-style-type: none"> Missed approach if Separation Inadequate 	2	1

UNIT: 4. EMERGENCY PROCEDURE

	Pilot	Inst

FLYING STANDARD	Certificate	Rating
Engine problems.		
• Formation Breakup.	2	1
• Radio Procedure (Lead)	2	1
• Emergency procedure followed by PIC as per Aircraft Operating Handbook.	2	1
• SAR Assistance.	2	1
Collision.		
• Formation Breakup.	2	1
• Visual Inspection by third party.	2	1
• Controllability check.	2	1
Radio failure.		
• Radio failure procedure.	2	1
• Return to base procedure.	2	1

End of Formation Syllabus

RECREATIONAL AVIATION AUSTRALIA INC.
CROSS COUNTRY ENDORSEMENT SYLLABUS.

UNIT 1. CROSS COUNTRY FLIGHT

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
1.1 Prepare flight plan and comply with airspace requirements.			
<ul style="list-style-type: none"> Current suitable charts and documentation are selected and prepared. Applicable information obtained analysed and applied to produce a detailed flight plan. 	3	2	1
	3	2	1
1.2 Notification and lodge flight plan & SARWATCH.			
<ul style="list-style-type: none"> Flight plan details and SARWATCH details are lodged with Airservices or flight note left with a suitable party. 	3	2	1
1.3 Navigate aircraft.			
<ul style="list-style-type: none"> Departure track is intercepted within 2nm of departure aerodrome and departure time recorded. Planned route maintained. In flight recording is completed. Waypoint ETA's are checked and revised if required. Fuel use is monitored and fuel planning revised if required. Waypoint or pre descent checks completed. Track maintenance and adjustments or corrections made if required. 	3	2	1
	3	2	1
	3	2	1
	3	2	1
	3	2	1
	3	2	1
	3	2	1
1.4 Low level navigation.			
<ul style="list-style-type: none"> Navigate at low level. 	3	2	1
1.5 Perform lost procedure.			
<ul style="list-style-type: none"> Position is fixed, new track to destination or diversion point determined within fuel and daylight limitations. Revised ETA calculated. Radio is used to obtain assistance. Navigation aids used for assistance. Use of Landmarks and tracking features are used. 	3	2	1
	3	2	1
1.6 Plan and perform diversion.			
<ul style="list-style-type: none"> Diversion to an alternative landing or waypoint. 	3	2	1
1.7 Execute arrival procedures			
<ul style="list-style-type: none"> Applicable destination information obtained and applied. Radio communication established. Arrival at destination aerodrome in accordance with airspace requirements. SARWATCH cancelled. 	3	2	1
	3	2	1
	3	2	1
	3	2	1

End of Cross Country Syllabus

RECREATIONAL AVIATION AUSTRALIA Inc.
PASSENGER SYLLABUS

UNIT 1 : PASSENGER CARRYING ENDORSEMENT

Flying Standard	Pilot Certificate	Inst Rating
1.1 Brief passenger.		
• Passenger is thoroughly briefed and prepared for flight.	2	1
1.2 Seat and secure passenger.		
• Passenger secured in passenger seat.	2	1
1.3 Monitor and Manage passenger.		
• Passenger is regularly checked.	2	1
• Nervous or Anxious Passenger	2	1
• Turbulence	2	1
• Airsick Passenger	2	1
• Passenger Grabs Pilot or Aircraft Controls	2	1
• Passenger Faints or Unconscious	2	1
1.4 Pilot the aircraft.		
• Fly the aircraft with the extra weight and changed handling characteristics.	2	1
1.5 Emergency situations.		
• Incorporate passenger briefing and passenger management into normal emergency procedure.	2	1
1.6 Legal considerations.		
• Pilot briefs passenger on legal requirements for flight.	2	1

End of Passenger Syllabus

RECREATIONAL AVIATION AUSTRALIA Inc.
GLIDER TOW SYLLABUS

UNIT: 1. NORMAL PROCEDURE

Flying Standard	Pilot Certificate	Inst Rating
1.1 Ground Preparation.		
<ul style="list-style-type: none"> Know the GFA Operational Regulation in relation to glider aerotowing. 	2	1
<ul style="list-style-type: none"> Prepare towing aircraft (preflight) 	2	1
<ul style="list-style-type: none"> Check release mechanisms, mirrors, ropes, release rings and weak links. 	2	1
<ul style="list-style-type: none"> Know the glider's aerotowed maximum and minimum speeds 	2	1
<ul style="list-style-type: none"> Glider towing fuel consumption accounted for. 	2	1
<ul style="list-style-type: none"> Minimum rope length requirements 	2	1
<ul style="list-style-type: none"> Weak Link requirements. 	2	1
<ul style="list-style-type: none"> Ground Signals. 	2	1
<ul style="list-style-type: none"> Assess take off performance for aerodrome length requirements 	2	1
	2	1
1.2 Take Off.		
<ul style="list-style-type: none"> Interpret ground signals. 	2	1
<ul style="list-style-type: none"> Monitor take off performance and instigate aborted takeoff procedure if not optimal. 	2	1
<ul style="list-style-type: none"> Demonstrate ability to handle crosswind takeoff. 	2	1
<ul style="list-style-type: none"> Use mirrors to determine glider position. 	2	1
1.3 Climb.		
<ul style="list-style-type: none"> Maintain accurate speed and attitude for the climb regardless of low or high tow position. 	2	1
<ul style="list-style-type: none"> Correct engine handling procedures followed. 	2	1
<ul style="list-style-type: none"> Maintain lookout and minimise into sun towing for increased visibility. 	2	1
<ul style="list-style-type: none"> Towing pattern selected close to out landing areas. 	2	1
<ul style="list-style-type: none"> Avoidance of other traffic. 	2	1
<ul style="list-style-type: none"> Recognise high-tow and low-tow and transition between the two. 	2	1
<ul style="list-style-type: none"> Control tug attitude during 'boxing of the slipstream'. 	2	1
<ul style="list-style-type: none"> Ensure tug attitude and heading are controlled during 'out of position training'. 	2	1
	2	1
1.4 Release.		
<ul style="list-style-type: none"> Confirm glider release. 	2	1
<ul style="list-style-type: none"> Ensure glider clear. 	2	1
1.5 Descent.		
<ul style="list-style-type: none"> Good lookout performed. 	2	1
<ul style="list-style-type: none"> Engine management. 	2	1
1.6 Approach and Landing.		
<ul style="list-style-type: none"> Correct circuit entry. 	2	1
<ul style="list-style-type: none"> Normal aircraft checks. 	2	1
<ul style="list-style-type: none"> Consideration of trailing rope and drop rope procedure. 	2	1
<ul style="list-style-type: none"> Go-round Procedure. 	2	1
1.7 Cruising on tow.		
<ul style="list-style-type: none"> Manage tug and glider inertia. 	2	1
<ul style="list-style-type: none"> Select speed applicable to glider being towed. 	2	1
1.8 Descending on tow.		
<ul style="list-style-type: none"> Manage tug and glider inertia. 	2	1
<ul style="list-style-type: none"> Obstacle avoidance and usable runway requirements for glider if landing on tow. 	2	1
<ul style="list-style-type: none"> Maintain adequate Lookout. 	2	1

UNIT: 2. ABNORMAL PROCEDURES

Flying Standard	Pilot Certificate	Inst Rating
2.1 Stop on Take Off run.		
<ul style="list-style-type: none"> Glider release. 	2	1
<ul style="list-style-type: none"> Monitor glider position. 	2	1
<ul style="list-style-type: none"> Avoidance turn to clear glider. 	2	1
2.2 Partial Power Failure.		
<ul style="list-style-type: none"> On ground, release glider, avoid glider by using partial power or avoidance turn. 	2	1
<ul style="list-style-type: none"> In air, release glider if not yet past point of no return conduct landing on runway remaining. 	2	1
<ul style="list-style-type: none"> Past the point of no return, release glider with regard given to glider landing area. 	2	1
<ul style="list-style-type: none"> Carry out forced landing if required. 	2	1

2.3 Glider airbrakes open during climb.		
• Glider release if required.	2	1
• Release Signal.	2	1
2.4 Order to glider pilot, release glider.		
• Give glider release signal.	2	1
2.5 Glider unable to release.		
• Recognise glider unable to release signal.	2	1
2.6 Glider and Tug unable to release.		
• Recognise glider and tug unable to release signal	2	1
• Conduct a landing in tow (Optional)	2	1

End of Glider Tow Syllabus

RECREATIONAL AVIATION AUSTRALIA Inc.
WATERBORNE SYLLABUS

UNIT: 1. MANAGE PRE AND POST FLIGHT ACTIONS

Flying Standards	Before Solo	Pilot Certificate	Inst Rating
1.1 Complete pre and post flight administration.			
• Pre-flight planning and documentation is completed in accordance with regulations and/or operations manual.	3	2	1
• Aeroplane take-off and landing performance is calculated in accordance with performance and weight and balance charts.	3	2	1
• Pre and post flight logbook and flight administration is completed in accordance with tech manual and/or operations manual.	3	2	1
• Aeroplane serviceability is determined by daily inspection, and certification of daily inspection in maintenance logbook is completed in accordance with regulations.	3	2	1
1.2 Perform pre-flight inspection.			
• Equipment and documentation as required by regulation is identified and secured in the aeroplane, and internal and external checks are completed in accordance with approved checklist.	3	2	1
• Ensure lifejackets are in place and have been checked serviceable.	3	2	1
1.3 Perform and certify daily inspection.			
• A daily inspection of aeroplane is performed in accordance with aeroplane system of maintenance as required by the RECREATIONAL AVIATION AUSTRALIA INC. Technical Manual section 4.2.1	3	2	1
• Bungs and drains	3	2	1
1.4 Launch waterborne aircraft.			
• Deepwater launch.	3	2	1
• Beach/ramp launch.	3	2	1
1.5 Check for leaks.			
• Check float/hull buoyancy.	3	2	1
• Check individual compartments for leaks.			

UNIT: 2. CONTROL WATERBORNE AIRCRAFT ON THE WATER

Flying Standards	Before Solo	Pilot Certificate	Inst Rating
2.1 Start and stop engine.			
• Pre-start and after start checks are completed in accordance with Flight Manual/POH.	3	2	1
• Engine is started and shut down in accordance with Flight Manual/POH.	3	2	1
• Emergencies are managed in accordance with Flight Manual/POH.	3	2	1
• Pre-and after shutdown checks are completed in accordance with Flight Manual/POH.	3	2	1
2.2 Low speed (Displacement) taxiing.			
• Water rudders.	3	2	1
• Power control.	3	2	1
• Inertia control.	3	2	1
• Wind effects.	3	2	1
• Wake.	3	2	1
2.3 Plough Taxiing.			
• Water rudders.	3	2	1
• Power control.	3	2	1
• Wind effects.	3	2	1
• CoB (Centre of Buoyancy).	3	2	1
2.4 Step Taxiing.			
• Water rudders.	3	2	1
• Transition to step.	3	2	1
• Stability on step.	3	2	1
• Reverse transition to displacement taxi.	3	2	1
2.5 Step Turns.			
• Floating hull.	3	2	1
• Floats.	3	2	1
• Wind effects	3	2	1
2.6 Leaks.			
• Check float/hull buoyancy.	3	2	1
• Check individual compartments for leaks.	3	2	1

UNIT: 3. TAKE OFF WATERBORNE AIRCRAFT

Flying Standards	Before Solo	Pilot Certificate	Inst Rating
3.1 Carry out pre-take-off procedures.			
• Pre take-off checks are completed in accordance with approved checklist.	3	2	1
• Waterborne aircraft is lined up.	3	2	1
• Line up checks completed	3	2	1
3.2 Take-off waterborne aircraft.			
• Take off power is applied. Waterborne aircraft is maintained aligned with aiming point with wings maintained level and rotated at recommended speed to achieve water separation.	3	2	1
• Climb airspeed attained.	3	2	1
• Waterborne aircraft is configured for nominated climb profile and track towards aiming point is maintained.	3	2	1
3.3 Carry out after take-off procedures.			
• After take-off checks are performed from memory in accordance with approved checklist.	3	2	1

UNIT: 4 LAND WATERBORNE AIRCRAFT.

Flying Standards	Before Solo	Pilot Certificate	Inst Rating
4.1 Transitional landings.			
• Waterborne aircraft's rate of descent arrested and stabilised above water.	3	2	1
• Slight power reduction to allow hull/float contact with water in step taxiing attitude.	3	2	1
• Step taxiing attitude maintained.	3	2	1
• Power reduced and reverse transition to displacement taxi.	3	2	1
• Smooth or glassy water landings.	3	2	1
4.2 Conventional landings.			
• Conventional circuit approach to water landing area.	3	2	1
• Power increased prior to flare point.	3	2	1
• Touchdown as per Transitional landing.	3	2	1
• Glide approach.	3	2	1
• Touch and go.	3	2	1
4.3 Rough water landings.			
• Wind direction and strength accurately attained.	3	2	1
• Swell avoidance.	3	2	1
• Waterborne aircraft handling.	3	2	1
• Go round.	3	2	1
4.4 Perform go-round procedure.			
• Decision to perform miss landing is made when landing standards cannot be achieved.	3	2	1
• Control of waterborne aircraft is maintained and circuit is performed.	3	2	1

UNIT: 5 EMERGENCY PROCEDURES.

Flying Standards	Before Solo	Pilot Certificate	Inst Rating
5.1 Engine failure after take off (water or land).			
• Immediate actions are performed in accordance with flight manual/POH with due regard to low drag/high inertia design.	3	2	1
• A landing area within gliding distance is selected, emergency procedures are performed in accordance with flight manual/POH and the waterborne aircraft is landed with due regard to high drag/low inertia design.	3	2	1
• If applicable, landing gear retracted or extended as required.	3	2	1
5.2 Manage engine failure elsewhere in circuit (water or land).			
• Immediate actions are performed in accordance with flight manual/POH with due regard to high drag/low inertia design.	3	2	1
• A landing area within gliding distance, on the aerodrome or elsewhere, is selected.	3	2	1
• Emergency procedures are performed in accordance with flight manual/POH and the aeroplane is landed if the engine cannot be restarted.	3	2	1
• If applicable, landing gear retracted or extended as required.	3	2	1
5.3 Manage forced landing en-route (water or land).			
• Immediate actions are performed in accordance with flight manual/POH with due regard to high drag/low inertia design.	3	2	1

<ul style="list-style-type: none"> Landing area within gliding distance is selected, all emergency checks are performed in accordance with the flight manual/POH, and if an engine restart is not achieved a controlled landing is performed with due regard to high drag/low inertia design. 	3	2	1
<ul style="list-style-type: none"> If applicable undercarriage up or down selection based on terrain type. 	3	2	1
5.4 Conduct precautionary search and landing (land or water).			
<ul style="list-style-type: none"> Air Traffic Services are advised of intentions if possible. 	3	2	1
<ul style="list-style-type: none"> Landing area is selected and inspected for approach, landing distance and surface, and overshoot clearance and waterborne aircraft is landed. 	3	2	1
<ul style="list-style-type: none"> If applicable, landing gear retracted or extended as required. 	3	2	1
5.5 Capsize.			
<ul style="list-style-type: none"> Passenger pre-flight brief conducted. 	3	2	1
<ul style="list-style-type: none"> Harness release briefing conducted. 	3	2	1
<ul style="list-style-type: none"> Exiting the waterborne aircraft briefing conducted. 	3	2	1
<ul style="list-style-type: none"> Personal flotation equipment briefing conducted. 	3	2	1
5.6 Manage abnormal situations.			
<ul style="list-style-type: none"> Abnormal situation involving fuel, electrical, airframe, flight instrument, flight control, engine or radio, fire, smoke and fumes are identified. 	3	2	1
<ul style="list-style-type: none"> Appropriate emergency procedures are conducted in accordance with flight manual/POH and published procedures while maintaining control of the waterborne aircraft. 	3	2	1

End of Waterborne Syllabus

RECREATIONAL AVIATION AUSTRALIA Inc.
NOSEWHEEL SYLLABUS

UNIT: 1. PRE FLIGHT

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
Considerations before start up.			
<ul style="list-style-type: none"> Pre flight of aircraft completed with special consideration given to the nose wheel structure, condition and serviceability. 	3	2	1
<ul style="list-style-type: none"> Aircraft manoeuvred to start up area suitable for low clearance propellers. 	3	2	1

UNIT: 2. GROUND HANDLING

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
Considerations on the ground.			
<ul style="list-style-type: none"> Steering and directional control maintained whilst taxiing 	3	2	1
<ul style="list-style-type: none"> Control stick held back to offer reduced weight on nose wheel whilst moving over uncertain, soft or loose ground. 	3	2	1
<ul style="list-style-type: none"> Control stick position considerations in strong winds (eg quartering tailwind whilst taxiing) 	3	2	1

UNIT: 3. TAKE OFF AND LANDING

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
Normal Operations.			
<ul style="list-style-type: none"> Directional control is maintained on take off. 	3	2	1
<ul style="list-style-type: none"> Nose wheel is held off on the landing until elevator authority is lost. 	3	2	1
<ul style="list-style-type: none"> Directional control is maintained during landing and through the roll out. 	3	2	1
<ul style="list-style-type: none"> Weight is held off the nose wheel during the roll out with special consideration to braking. 	3	2	1
Rough or Soft Field Operations.			
<ul style="list-style-type: none"> Nose wheel pressure minimised on take off. 	3	2	1
<ul style="list-style-type: none"> Braking is minimised to avoid excess nose wheel pressure and damage due to overstress. 	3	2	1

End of Nose Wheel Syllabus

RECREATIONAL AVIATION AUSTRALIA Inc.
TAIL WHEEL SYLLABUS

UNIT: 1. PRE FLIGHT

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
1.1 Considerations before start up.			
<ul style="list-style-type: none"> Student demonstrates sound knowledge of difference in centre of gravity handling between nose wheel and tail wheel aircraft. 	3	2	1
<ul style="list-style-type: none"> Pre flight of aircraft completed with special consideration given to the tail wheel structure, condition and serviceability. 	3	2	1
<ul style="list-style-type: none"> Aircraft manoeuvred to start up area suitable for propeller type and position. 	3	2	1

UNIT: 2. GROUND HANDLING

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
2.1 Considerations on the ground.			
<ul style="list-style-type: none"> Steering and directional control maintained whilst taxiing 	3	2	1
<ul style="list-style-type: none"> Control stick held back to afford directional control of tail wheel whilst taxi-ing in headwind situations. 	3	2	1
<ul style="list-style-type: none"> Control stick held forward to afford directional control of tail wheel whilst taxi-ing downwind. 	3	2	1
<ul style="list-style-type: none"> Control stick held back to afford directional control of tail wheel whilst moving over uncertain, soft or loose ground. 	3	2	1
<ul style="list-style-type: none"> Control stick position consideration when taxiing in strong crosswinds 	3	2	1

UNIT: 3. TAKE OFF AND LANDING

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
3.1 Normal Operations.			
<ul style="list-style-type: none"> Directional control is maintained during power application. 	3	2	1
<ul style="list-style-type: none"> Directional control is maintained when tail wheel authority is lost after tail up. 	3	2	1
<ul style="list-style-type: none"> Tail wheel authority is regained by use of elevator during three point landings. 	3	2	1
<ul style="list-style-type: none"> Directional control is maintained during landing and through the roll out. 	3	2	1
<ul style="list-style-type: none"> Directional control is maintained during touchdown in wheeler attitude. 	3	2	1
<ul style="list-style-type: none"> Bounce and aerodynamic pinning of the aircraft is minimised during wheeler landing. 	3	2	1
<ul style="list-style-type: none"> Directional control is maintained after tail wheel regains authority after wheeler landing. 	3	2	1
<ul style="list-style-type: none"> Weight is held on the tail wheel during the roll out with special consideration to braking. 	3	2	1
3.2 Rough or Soft Field Operations.			
<ul style="list-style-type: none"> 3 point takeoff for short and rough field operations. 	3	2	1
<ul style="list-style-type: none"> Braking is minimised to avoid main wheel bogging on soft field during operation. 	3	2	1
<ul style="list-style-type: none"> Short field 3 point landing is used for rough or soft landing grounds. 	3	2	1

End of Tail Wheel Syllabus

RECREATIONAL AVIATION AUSTRALIA Inc.
RETRACTABLE UNDERCARRIAGE ENDORSEMENT

UNIT: 1. THEORETICAL UNDERSTANDING.

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
1.1 Theoretical Understanding.			
<ul style="list-style-type: none"> Pilot accurately describes the use of retractable undercarriages in recreational aircraft. 	3	2	1
<ul style="list-style-type: none"> Pilot understands and explains the retraction system mechanics and can cite type of retraction mechanism and also specific system requirements for particular types. 	3	2	1
<ul style="list-style-type: none"> Pilot explains the significance of cockpit gear light indicators. 	3	2	1

UNIT: 2. NORMAL OPERATIONS.

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
2.1 Gear Extension.			
<ul style="list-style-type: none"> Pilot demonstrates checklist item for gear extension. 	3	2	1
<ul style="list-style-type: none"> Pilot demonstrates gear actuation lever to extend landing gear from retracted position. 	3	2	1
<ul style="list-style-type: none"> Pilot demonstrates visual check of indication system and if visible, physical position of landing gear to confirm extension. 	3	2	1
<ul style="list-style-type: none"> Pilot demonstrates on final approach check to confirm 'three greens' or visual physical position of gear check. 	3	2	1
2.2 Gear Indication System.			
<ul style="list-style-type: none"> Pilot demonstrates understanding of gear indication lights or visual checking mechanism and any items peculiar to type as stated in the aircraft flight manual and POH. 	3	2	1
2.3 Gear Retraction.			
<ul style="list-style-type: none"> Pilot demonstrates checklist item for gear retraction. 	3	2	1
<ul style="list-style-type: none"> Pilot demonstrates gear actuation lever to retract landing gear from extended position. 	3	2	1
<ul style="list-style-type: none"> Pilot demonstrates visual check of indication system and if visible, physical position of landing gear to confirm retraction. 	3	2	1
<ul style="list-style-type: none"> Pilot demonstrates after take off and at a safe height as per the aircraft flight manual and POH the retraction of the gear and associated checks. 	3	2	1

UNIT: 3. EMERGENCY OPERATIONS.

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
3.1 Gear Retraction Failure.			
<ul style="list-style-type: none"> On the initial indication of a gear retraction failure the Pilot demonstrates sound judgement in relation to Aviate, Navigate Communicate (ANC) principles. 	3	2	1
<ul style="list-style-type: none"> Pilot demonstrates emergency procedure as per aircraft flight manual and POH. 	3	2	1
<ul style="list-style-type: none"> Pilot demonstrates normal checklist before returning for a landing with respect to confirmation of gear down and locked. 	3	2	1
3.2 Gear Indication Failure.			
<ul style="list-style-type: none"> Pilot demonstrates visual check of gear before concluding that the gear indication system has failed. 	3	2	1
<ul style="list-style-type: none"> Pilot demonstrates ability to reset gear indication circuit breaker/fuse. 	3	2	1
<ul style="list-style-type: none"> Pilot demonstrates ability to adjust or conclude that the gear indication bulb/LED is unserviceable. 	3	2	1
3.3 Gear Extension Failure.			
<ul style="list-style-type: none"> On initial indication of a gear extension failure the pilot demonstrates sound judgement in relation to ANC principles. 	3	2	1
<ul style="list-style-type: none"> Pilot demonstrates emergency procedure as per aircraft flight manual or POH. 	3	2	1
<ul style="list-style-type: none"> Pilot demonstrates use of emergency gear actuation system. 	3	2	1
<ul style="list-style-type: none"> Pilot demonstrates normal checklist before returning for a landing with respect to confirmation of gear down and locked. 	3	2	1
<ul style="list-style-type: none"> If required, Pilot describes the procedure for belly landing as per 	3	2	1

aircraft flight manual or POH.			
3.4 Partial Extension/Retraction.			
<ul style="list-style-type: none"> • On initial indication of a gear partial extension/retraction failure the pilot demonstrates sound judgement in relation to ANC principles. 3 • Pilot demonstrates emergency procedure as per aircraft flight manual or POH. 3 • Pilot demonstrates use of emergency gear actuation system. 3 • Pilot demonstrates normal checklist before returning for a landing with respect to confirmation of gear down and locked. 3 • If required, Pilot describes the procedure for belly landing as per aircraft flight manual or POH. 3 	<p>2</p> <p>2</p> <p>2</p> <p>2</p> <p>2</p>	<p>1</p> <p>1</p> <p>1</p> <p>1</p> <p>1</p>	

End of Retractable Undercarriage Endorsement

Recreational Aviation Australia Inc.
IN FLIGHT ADJUSTABLE PROPELLER ENDORSEMENT

UNIT: 1. THEORETICAL UNDERSTANDING

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
1.1 Theoretical Understanding.			
<ul style="list-style-type: none"> • Pilot demonstrates theoretical understanding of propeller pitch changes in flight. • Pilot demonstrates theoretical understanding of the effect of changes in propeller pitch on aircraft in flight. • Pilot demonstrates theoretical understanding of the effect of changes of propeller pitch on engine performance and limitations. • Pilot is able to distinguish between different types of in-flight adjustable propellers. • Pilot is able to recount the advantages and disadvantages between fixed pitch and adjustable pitch propellers. 	3	2	1
	3	2	1
	3	2	1
	3	2	1
	3	2	1

UNIT: 2. NORMAL OPERATIONS

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
2.1 Pre-flight Inspection.			
<ul style="list-style-type: none"> • Pre-flight inspection carried out with special reference to the specifics of the in-flight adjustable propeller fitted. • Pilot performs pre-start up check of pitch full fine before start up if required as per propeller and aircraft flight manual. 	3	2	1
	3	2	1
2.2 Fine pitch and climb performance.			
<ul style="list-style-type: none"> • Pre-Take off checks completed. • Propeller pitch governor/actuator checked as per aircraft flight manual or POH. • Pitch selected full fine for take-off. • Max rate and Max angle take-offs and climb demonstrated. • Cruise climb transition from fine pitch to coarse demonstrated. • Transition from coarse pitch cruise to fine pitch max rate climb. 	3	2	1
	3	2	1
	3	2	1
	3	2	1
	3	2	1
2.3 Coarse pitch and cruise performance.			
<ul style="list-style-type: none"> • Transition from full power fine pitch climb to coarse pitch cruise • Transition from full power coarse pitch cruise climb to normal cruise. 	3	2	1
	3	2	1
2.4 Landing and circuit operation.			
<ul style="list-style-type: none"> • Demonstrate pitch check on final approach. • Demonstrate pitch reduction on finals back to full fine and explain the reason for this. • Demonstrate pitch increase on transition to cruise. 	3	2	1
	3	2	1
	3	2	1
2.5 Engine instrumentation and limitations.			
<ul style="list-style-type: none"> • Demonstrate practical interpretation of instrument indications relating to the operation of in-flight adjustable propeller. • Demonstrate sound engine handling and care with regard to manifold pressure and rpm. 	3	2	1
	3	2	1

UNIT: 3. EMERGENCY OPERATIONS

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
3.1 Engine Failure.			
<ul style="list-style-type: none"> • Pilot demonstrates theoretical understanding of propeller pitch alteration on glide performance. • Pilot demonstrates ability to recognise engine failure situation and adjust propeller pitch to increase glide performance. • Pilot demonstrates correct pitch settings for attempted engine restart. 	3	2	1
	3	2	1
	3	2	1
3.2 Engine Failure Simulation.			
<ul style="list-style-type: none"> • Instructor simulates engine failure with due regard to change of propeller pitch. • Instructor understands emergency restart procedures in case of real engine failure during simulation with regard to propeller pitch. 			1
			1
3.3 Full Feather Operations.			
<ul style="list-style-type: none"> • Pilot describes when use of full feather is used. • Pilot demonstrates use of the full feather option (if applicable to type) and also demonstrates sound ability to activate and deactivate full feather option. 	3	2	1
	3	2	1

<ul style="list-style-type: none"> Pilot demonstrates engine restart from full feather engine inoperative flight (Only with CFI) 	3	2	1
3.5 Pitch System Malfunction.			
<ul style="list-style-type: none"> Pilot identifies pitch system malfunction and aircraft is operated safely with regard to Aviate, Navigate, Communicate (ANC) principles. 	3	2	1
<ul style="list-style-type: none"> Pilot carries out actions as the aircraft flight manual or POH. 	3	2	1
<ul style="list-style-type: none"> Pilot demonstrates checklist actions before returning to land with respect to propeller. 	3	2	1

End of In Flight Adjustable Propeller Endorsement.

RECREATIONAL AVIATION AUSTRALIA Inc.
CONTROLLED AIRSPACE ENDORSMENT

UNIT: 1. CONTROLLED AIRSPACE TYPES AND BOUNDARIES.

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
1.1 Identify Airspace Boundaries.			
<ul style="list-style-type: none"> • Determine and explain the differences and the operational equipment differences required for entry into; <ul style="list-style-type: none"> ○ Class C airspace. 3 ○ Class D airspace. 3 ○ Class E airspace. 3 ○ Class G airspace. 3 ○ GAAP Aerodromes. 3 			
<ul style="list-style-type: none"> • Determine and explain airspace boundaries on a VTC with regard to ; <ul style="list-style-type: none"> ○ Upper airspace limits. 3 ○ Lower airspace limits. 3 ○ Airspace down to ground level. 3 			
<ul style="list-style-type: none"> • Determine and explain the significance of the following on a VTC; <ul style="list-style-type: none"> ○ VFR lanes of transit. 3 ○ VFR reporting points. 3 ○ PRD zones to be avoided. 3 ○ CTR. 3 			

UNIT: 2. AIRCRAFT AND EQUIPMENT SUITABILITY FOR ENTRY.

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
2.1 Factory Built Aircraft.			
<ul style="list-style-type: none"> • State the operational and equipment requirements for a factory built recreational aircraft to access; <ul style="list-style-type: none"> ○ Class C airspace. 3 ○ Class E airspace. 3 ○ Class D airspace. 3 ○ GAAP 3 			
2.2 Amateur Built Aircraft.			
<ul style="list-style-type: none"> • State the operational and equipment requirements for an amateur built recreational aircraft to access; <ul style="list-style-type: none"> ○ Class C airspace. 3 ○ Class E airspace. 3 ○ Class D airspace. 3 ○ GAAP. 3 			
2.3 Radio Requirements.			
<ul style="list-style-type: none"> • State the required maintenance that is to be duly performed on a VHF aircraft radio for entry into : <ul style="list-style-type: none"> ○ Class C airspace. 3 ○ Class E airspace. 3 ○ Class D airspace. 3 ○ GAAP. 3 • State the required interval between the scheduled maintenance on a VHF aircraft radio for entry into CTA. 			
2.4 Transponder Requirements.			
<ul style="list-style-type: none"> • State the required maintenance that is to be duly performed on a transponder for entry into : <ul style="list-style-type: none"> ○ Class C airspace. 3 ○ Class E airspace. 3 ○ Class D airspace. 3 • State the required interval between the scheduled maintenance on a transponder for entry into CTA. 3 			

UNIT: 3. AIR TRAFFIC CLEARANCES AND CTA OPERATIONS.

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
3.1 Clearances.			
<ul style="list-style-type: none"> • Demonstrate attaining the required clearances, if applicable, that must be obtained before; <ul style="list-style-type: none"> ○ Entering controlled airspace. 3 ○ Prior to starting engine. 3 ○ Taxying on the ground. 3 			

○ Prior to take off.	3	2	1
○ Departing after take off.	3	2	1
○ Before landing.	3	2	1
• Demonstrate the successful requesting of clearances on more than three flights. Containing the following ;			
○ Aircraft identification.	3	2	1
○ Destination, area of operation, position or clearance limit.	3	2	1
○ Route of the flight.	3	2	1
○ Assigned level.	3	2	1
○ Transponder code.	3	2	1
○ Any additional instructions.	3	2	1
• Maintain aircraft inside controlled airspace during;			
○ Climb.	3	2	1
○ During descent.	3	2	1
○ Manoeuvring.	3	2	1
• Demonstrate effective ability to read back clearances accurately.	3	2	1
• Demonstrate ability to maintain clearance consistently.	3	2	1
• Demonstrate ability to advise ATC if clearance cannot be maintained.	3	2	1
• Perform a Visual Approach as directed by ATC with respect to;			
○ Tracking requirements.	3	2	1
○ Minimum altitude requirements.	3	2	1
3.2 Comply With Airspace Requirements.			
• Aeroplane is maintained within a specified area, whilst complying with air traffic requirements, restricted airspace conditions or limitations of controlled airspace and reacting to factors which affect the safe progress of the flight with due regard to the performance design.	3	2	1
• Demonstrate on more than 3 occasions to be able to successfully and competently operate in a controlled airspace environment.	3	2	1
3.3 Medical Standard.			
• State the required medical standards required for the operation of Recreational Aircraft inside controlled airspace.	3	2	1

UNIT: 4. FLIGHT PLANNING REQUIREMENTS

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
4.1 Non- Planned Arrival or Transit.			
• Explain the possible requirements for holding directed at an aircraft that conducts a non-planned arrival or transit of the CTA with respect to;			
○ Possible holding requirements OCTA.	3	2	1
○ Planning requirements with regard to fuel.	3	2	1
4.2 Planned Arrival or Transit.			
• Explain and demonstrate the procedure for submitting a flight plan for transit or arrival at a CTR, with regard to;			
○ Contents of a flight plan.	3	2	1
○ Submission time before entry into CTA.	3	2	1
○ VFR "Pop Up" procedures.			

End of Controlled Airspace Endorsement

RECREATIONAL AVIATION AUSTRALIA Inc.
ADVANCED PILOT AWARD

UNIT: 1. AIRMANSHIP.

Flying Standard	Pilot Certificate	Inst Rating
1.1 General Airmanship.		
<ul style="list-style-type: none"> Lookout is maintained during operations on both the ground and in the airborne environment. 	2	1
<ul style="list-style-type: none"> Scan technique is used to promote lookout. 	2	1
<ul style="list-style-type: none"> Decision making is consistent with good aeronautical practise and all normal operating practices and rules are adhered to. 	2	1
<ul style="list-style-type: none"> Engine handling is conducted in a manner that is conducive with good aeronautical practices and is consistent with both aircraft flight manual and POH. 	2	1
<ul style="list-style-type: none"> Ground handling is conducted in safe manner conducive with good aeronautical practice and is preventative in its operation in causing damage to aircraft or persons on the ground. 	2	1

UNIT: 2. TAKE OFF SAFETY BRIEF

Flying Standard	Pilot Certificate	Inst Rating
2.1 Engine Failure on Take Off Roll.		
<ul style="list-style-type: none"> Student conducts a pre take off safety brief with relation to engine failure on take off, whilst still on ground. 	2	1
2.2 Engine Failure after Take Off with Runway Remaining.		
<ul style="list-style-type: none"> Student conducts a pre take off safety brief with relation to engine failure on take off after the aircraft is airborne but with runway remaining. 	2	1
2.3 Engine Failure on Take Off without Runway Remaining.		
<ul style="list-style-type: none"> Student conducts a pre take off safety brief with relation to engine failure on take off after the aircraft is airborne and has passed the point of no return and must land outside the aerodrome boundary. 	2	1
2.4 Engine Failure on Take Off and Turn Back Procedure.		
<ul style="list-style-type: none"> Student conducts a pre take off safety brief with relation to engine failure on take off after the aircraft is airborne and is at a nominated height that is consistent with a safe execution of a turn back. 	2	1
<ul style="list-style-type: none"> The turn back is described by direction and is consistent with safe aeronautical practice given the topography and the current wind. 	2	1

UNIT: 3. STEEP LAZY EIGHTS.

Flying Standard	Pilot Certificate	Inst Rating
3.1 Entry.		
<ul style="list-style-type: none"> Pre-Manoeuvre checks completed. 	2	1
<ul style="list-style-type: none"> Reference point established. 	2	1
<ul style="list-style-type: none"> Entry into the manoeuvre is initiated from straight and level in balanced flight and altitude and airspeed noted. 	2	1
3.2 Maintenance.		
<ul style="list-style-type: none"> Climbing turn is initiated through 90degrees at nominated bank angle. 	2	1
<ul style="list-style-type: none"> Turn is continued through 180 degrees and descent is initiated, wings are level through reference point at previous altitude and airspeed. 	2	1
<ul style="list-style-type: none"> Climbing turn is initiated through 90degrees at nominated bank angle. 	2	1
<ul style="list-style-type: none"> 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 style="list-style-type: none"> Lookout is maintained at all times during manoeuvre. 		
<ul style="list-style-type: none"> Aircraft bank angle does not exceed 60 degrees. 		

UNIT: 4. MAINTAIN BALANCED FLIGHT

Flying Standard	Pilot Certificate	Inst Rating
4.1 Co-ordination.		
<ul style="list-style-type: none"> Co-ordination is maintained during all operations with the exception of sideslipping and aircraft is flown efficiently and safely. 	2	1

UNIT: 5. STEEP 360 DEGREE GLIDING TURNS

Flying Standard	Pilot Certificate	Inst Rating
5.1 Entry.		
<ul style="list-style-type: none"> Pre-manoeuve 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 1
5.2 Maintain.		
<ul style="list-style-type: none"> Lookout is maintained into 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	1 1 1 1 1
5.3 Exit.		
<ul style="list-style-type: none"> 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

UNIT: 6. SIDESLIPPING

Flying Standard	Pilot Certificate	Inst Rating
6.1 Entry.		
<ul style="list-style-type: none"> Lookout is performed before manoeuvre is initiated. Controls are crossed to initiate manoeuvre in a smooth manner. Aiming point is selected. 	2 2	1 1
6.2 Maintenance.		
<ul style="list-style-type: none"> Aircraft is manoeuvred to maintain aiming point, left and right. Pre-determined speed is maintained during manoeuvre. Lookout continues to be performed. 	2 2 2	1 1 1
6.3 Exit.		
<ul style="list-style-type: none"> Aircraft controls are uncrossed in a controlled and smooth manner. Aircraft is recovered back to straight and level at a pre-determined height. 	2 2	1 1

UNIT: 7. SLIPPING TURNS

Flying Standard	Pilot Certificate	Inst Rating
7.1 Entry.		
<ul style="list-style-type: none"> 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 1
7.2 Maintenance.		
<ul style="list-style-type: none"> Aircraft is manoeuvred to maintain turn to a pre-determined height and angle of bank, left and right. Lookout continues to be performed. 	2 2	1 1
7.3 Exit.		
<ul style="list-style-type: none"> Aircraft controls are uncrossed in a controlled and smooth manner. Aircraft is recovered back to straight and level at a pre-determined height and heading. 	2 2	1 1

UNIT: 8. STALL RECOVERY FROM SLIPPING TURN

	Pilot	Inst

Flying Standard	Certificate	Rating
8.1 Entry.		
<ul style="list-style-type: none"> Pre-Manoeuvre check is completed. Controls are used to initiate manoeuvre in a smooth manner. 	2 2	1 1
8.2 Maintenance.		
<ul style="list-style-type: none"> Aircraft is manoeuvred to maintain turn to a pre-determined height and angle of bank, left and right. Aircraft is eased into the stall by back pressure on the controls Lookout continues to be performed. 	2 2 2	1 1 1
8.3 Exit.		
<ul style="list-style-type: none"> Aircraft is recovered at point of stall using normal stall/spin recovery procedure. Aircraft is recovered back to straight and level with minimum height loss conducive with aircraft type. 	2 2	1 1

UNIT: 9. STALL RECOVERY IN A CLIMBING TURN

Flying Standard	Pilot Certificate	Inst Rating
9.1 Entry.		
<ul style="list-style-type: none"> Pre-Manoeuvre check is completed. Controls are used to initiate manoeuvre in a smooth manner to the desired bank angle in the climb. 	2 2	1 1
9.2 Maintenance.		
<ul style="list-style-type: none"> Aircraft is eased into the stall by back pressure on the controls Lookout continues to be performed. 	2 2	1 1
9.3 Exit.		
<ul style="list-style-type: none"> Aircraft is recovered at point of stall using normal stall/spin recovery procedure. Aircraft is recovered back to straight and level with minimum height loss conducive with aircraft type. 	2 2	1 1

UNIT: 10. STALL RECOVERY IN A SKIDDING TURN

Flying Standard	Pilot Certificate	Inst Rating
10.1 Entry.		
<ul style="list-style-type: none"> Pre-Manoeuvre check is completed. Controls are used to initiate manoeuvre in a smooth manner. 	2 2	1 1
10.2 Maintenance.		
<ul style="list-style-type: none"> Aircraft is eased into the stall by back pressure on the controls Lookout continues to be performed. 	2 2	1 1
10.3 Exit.		
<ul style="list-style-type: none"> Aircraft is recovered at point of stall using normal stall/spin recovery procedure. Aircraft is recovered back to straight and level with minimum height loss conducive with aircraft type. 	2 2	1 1

UNIT: 11. STALL RECOVERY FROM A STEEP GLIDING TURN

Flying Standard	Pilot Certificate	Inst Rating
11.1 Entry.		
<ul style="list-style-type: none"> Pre-Manoeuvre check is completed. Controls are used to initiate manoeuvre in a smooth manner. Aircraft is rolled to achieve pre-determined angle of bank. 	2 2 2	1 1 1
11.2 Maintenance.		
<ul style="list-style-type: none"> Aircraft is eased into the stall by back pressure on the controls Lookout continues to be performed. 	2 2	1 1
11.3 Exit.		
<ul style="list-style-type: none"> Aircraft is recovered at point of stall using normal stall/spin recovery procedure. Aircraft is recovered back to straight and level with minimum height loss conducive with aircraft type. 	2 2	1 1

UNIT: 12. STALL RECOVERY FROM A SIDESLIP

	Pilot	Inst

Flying Standard	Certificate	Rating
12.1 Entry.		
<ul style="list-style-type: none"> Pre-Manoeuvre check is completed. Controls are used to initiate manoeuvre in a smooth manner. 	2 2	1 1
12.2 Maintenance.		
<ul style="list-style-type: none"> Aircraft is eased into the stall by back pressure on the controls Lookout continues to be performed. 	2 2	1 1
12.3 Exit.		
<ul style="list-style-type: none"> Aircraft is recovered at point of stall using normal stall/spin recovery procedure. Aircraft is recovered back to straight and level with minimum height loss conducive with aircraft type. 	2 2	1 1

UNIT: 13. GROUND REFERENCE MANOEUVERS(Constant Altitude/Radius Turns)

Flying Standard	Pilot Certificate	Inst Rating
13.1 Entry.		
<ul style="list-style-type: none"> Lookout is performed before manoeuvre is initiated. Controls are used to initiate turn in a smooth manner. 	2 2	1 1
13.2 Maintenance.		
<ul style="list-style-type: none"> Aircraft is turned to scribe a constant radius ground track adjusted for wind. Altitude is maintained. Lookout continues to be performed. 	2 2 2	1 1 1
13.3 Exit.		
<ul style="list-style-type: none"> Aircraft is recovered back to straight and level. 	2	1

UNIT: 14. GLIDE FROM OVERHEAD THE FIELD.

Flying Standard	Pilot Certificate	Inst Rating
14.1 Aircraft positioning.		
<ul style="list-style-type: none"> Aircraft is positioned above the intended landing area at 2000ft AGL 	2	1
14.2 Glide.		
<ul style="list-style-type: none"> Power is reduced to idle and best glide speed is selected and maintained. 	2	1
14.3 Aim point.		
<ul style="list-style-type: none"> Aim point is selected on landing area. Aircraft is manoeuvred to touchdown on aim point. 	2 2	1 1
14.4 Lookout.		
<ul style="list-style-type: none"> Lookout is maintained during manoeuvre and all require radio calls are made. 	2	1

UNIT: 15. CROSSWIND TAKE OFF AND LANDING

Flying Standard	Pilot Certificate	Inst Rating
15.1 Take Off.		
<ul style="list-style-type: none"> Student controls direction on take off Maintains track on climb out. 	2	1
15.2 Circuit.		
<ul style="list-style-type: none"> Aircraft maintains normal circuit boundaries allowing for wind and drift. 	2	1
15.3 Approach.		
<ul style="list-style-type: none"> Aircraft maintains track on finals allowing for wind. 	2	1
15.4 Lookout.		
<ul style="list-style-type: none"> Lookout is maintained during manoeuvre and all require radio calls are made. 	2	1

UNIT: 16. SHORT FIELD APPROACH

Flying Standard	Pilot Certificate	Inst Rating
16.1 Pre-Landing Checks.		
<ul style="list-style-type: none"> Pre-landing checks are carried out 	2	1
16.2 Airspeed Maintenance.		

<ul style="list-style-type: none"> Airspeed is maintained at short field approach speed consistent with type as detailed in the aircraft flight manual of POH, also allowing for conditions on the day. 	2	1
16.3 Use of Power.		
<ul style="list-style-type: none"> Pilot recognises overshoot/undershoot and adjusts power to correct. 	2	1
16.4 Aim Point.		
<ul style="list-style-type: none"> Aircraft touches down on aim point. Application of brake to minimise ground run. 	2 2	1 1

UNIT: 17. WEIGHT AND BALANCE

Flying Standard	Pilot Certificate	Inst Rating
17.1 Loading and Weight and Balance .		
<ul style="list-style-type: none"> Explain the loading and weight and balance limitations to the aircraft used in the testing process. List ways the aircraft may be loaded below MTOW that may affect its safety. 	2	1

UNIT: 18. PERFORMANCE FIGURES

Flying Standard	Pilot Certificate	Inst Rating
18.1 MTOW.		
<ul style="list-style-type: none"> Quote aircraft MTOW as per flight Manual or POH. 	2	1
18.2 Normal Approach.		
<ul style="list-style-type: none"> Quote aircraft normal approach speed. 	2	1
18.3 Vs.		
<ul style="list-style-type: none"> Quote aircraft stall speed at MTOW . 	2	1
18.4 Va.		
<ul style="list-style-type: none"> Quote aircraft manoeuvring speed. 	2	1
18.5 Vne.		
<ul style="list-style-type: none"> Quote Aircraft never exceed speed. 	2	1
18.6 Short Field Approach Speed.		
<ul style="list-style-type: none"> Quote aircraft short field approach speed. 	2	1

End of Advanced Pilot Award.

RECREATIONAL AVIATION AUSTRALIA INC.
TWO STROKE ENDORSEMENT

UNIT: 1. Two Stroke Engines

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
1.1 Theory and Pre Flight.			
<ul style="list-style-type: none"> • Understands the basic theory of two stroke motors. • Describes the use of CHT and EGT gauges with relation to two stroke aircraft operation. • Describe the difference between oil injection and pre-mixed two stroke fuel and lubrication. • Demonstrate pre-flight on engine with respect to fluid levels, type of oil and quantity in rotary valve lubrication system. 	3 3 3 3	2 2 2 2	1 1 1 1
1.2 In Flight Operation.			
<ul style="list-style-type: none"> • Conducts start up with and without choke and/or primer. • Conducts engine idle at appropriate RPM to avoid engine rough running. • Conducts warm up and run up procedures IAW engine manufacturers manual. • Conducts in flight operation with special reference to in flight instrument monitoring of EGT, CHT and Water Temp. • Conducts high powered RPM operations and is aware of engine power band and immediate power delay in go-round situation. • Conducts low powered descents with regard to good engine management and warming of engine. 	3 3 3 3 3 3	2 2 2 2 2 2	1 1 1 1 1 1
1.3 Refuelling .			
<ul style="list-style-type: none"> • Conducts refuelling operation with respect to engine's lubrication system. (Oil Injected/Pre-mixed). • Conducts fuel drain with respect to colouration. (Oil Injected/Pre-mixed). 	3 3	2 2	1 1

End of Two Stroke Endorsement

NOTE : Operations with engine stopped in the circuit may only be conducted by a CFI in controlled situations in suitable flying conditions.

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