

UNIT 1.15 - RETRACTABLE UNDERCARRIAGE ENDORSEMENT SYLLABUS

ELEMENT: 1. THEORETICAL UNDERSTANDING

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
1.1 Theoretical Understanding			
<ul style="list-style-type: none"> Use of retractable undercarriages relevant to recreational aeroplanes 	3	2	1
<ul style="list-style-type: none"> The retraction system mechanics and type of retraction mechanism 	3	2	1
<ul style="list-style-type: none"> Specific system requirements for particular types 	3	2	1
<ul style="list-style-type: none"> Significance of cockpit gear light indicators 	3	2	1

ELEMENT: 2. NORMAL OPERATIONS

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
2.1 Gear Extension			
<ul style="list-style-type: none"> Checklist item for gear extension added 	3	2	1
<ul style="list-style-type: none"> Gear actuation system to extend landing gear from retracted position understood 	3	2	1
<ul style="list-style-type: none"> Visual check of indication system conducted and if possible, physical position of landing gear confirmed 	3	2	1
<ul style="list-style-type: none"> Final approach check conducted to confirm 'three greens' or visual confirmation of physical position of gear 	3	2	1
2.2 Gear Indication System			
<ul style="list-style-type: none"> Understanding of gear indication lights or visual checking mechanism and items peculiar to type as stated in the aeroplane Flight Manual 	3	2	1
2.3 Gear Retraction			
<ul style="list-style-type: none"> Checklist item for gear retraction added 	3	2	1
<ul style="list-style-type: none"> Gear actuation system to retract landing gear from extended position understood 	3	2	1
<ul style="list-style-type: none"> Visual check of indication system conducted and if possible, physical position of landing gear confirmed 	3	2	1
<ul style="list-style-type: none"> Safe height after take-off for retraction of the gear and appropriate checks as per the aeroplane Flight Manual recommendations 	3	2	1

ELEMENT: 3. EMERGENCY OPERATIONS

Flying Standard	Before Solo	Pilot Certificate	Inst Rating
3.1 Gear Retraction Failure			
<ul style="list-style-type: none"> Sound judgement in relation to Aviate, Navigate, Communicate (ANC) principles on the initial indication of a gear retraction failure 	3	2	1
<ul style="list-style-type: none"> Emergency procedure as per aeroplane Flight Manual 	3	2	1
<ul style="list-style-type: none"> Normal checklist undertaken before returning for a landing to confirm gear down and locked 	3	2	1
3.2 Gear Indication Failure			
<ul style="list-style-type: none"> Visual check of gear conducted, as applicable, prior to concluding that the gear indication system has failed 	3	2	1
<ul style="list-style-type: none"> Reset breaker/fuse on gear indication circuit as appropriate 	3	2	1
<ul style="list-style-type: none"> Determine the gear indication bulb/LED is unserviceable 	3	2	1
3.3 Gear Extension Failure			
<ul style="list-style-type: none"> Sound judgement in relation to ANC principles on initial indication of a gear extension failure 	3	2	1
<ul style="list-style-type: none"> Emergency procedure as per aeroplane Flight Manual 	3	2	1
<ul style="list-style-type: none"> Use of emergency gear actuation system (simulated as required) 	3	2	1
<ul style="list-style-type: none"> Normal checklist undertaken prior to returning for landing to ensure confirmation of gear down and locked 	3	2	1
<ul style="list-style-type: none"> Describe the procedure for undercarriage retracted landing as per aeroplane Flight Manual 	3	2	1
3.4 Partial Extension/Retraction			
<ul style="list-style-type: none"> Sound judgement in relation to ANC principles on initial indication of a partial gear extension or retraction failure 	3	2	1
<ul style="list-style-type: none"> Emergency procedure as per aeroplane Flight Manual 	3	2	1
<ul style="list-style-type: none"> Use of emergency gear actuation system (simulated as required) 	3	2	1
<ul style="list-style-type: none"> Normal checklist conducted prior to landing to ensure gear down and locked 	3	2	1
<ul style="list-style-type: none"> Describe the procedure for undercarriage retracted landing as per aeroplane Flight Manual in the event of an engine failure 	3	2	1

-End of Retractable Undercarriage Endorsement Syllabus-