Module 17B.Propeller

Note: The scope of this Module shall reflect the propeller technology of aeroplanes pertinent to the B3 category.

	Level
	B3
17.1 **Fundamentals** Blade element theory; High/low blade angle, reverse angle, angle of attack, rotational speed; Propeller slip; Aerodynamic, centrifugal, and thrust forces; Torque; Relative airflow on blade angle of attack; Vibration and resonance.	2
17.2 **Propeller Construction** Construction methods and material used in wooden, composite and metal propellers; Blade station, blade face, blade shank, blade back and hub assembly; Fixed pitch, controllable pitch, constant speeding propeller; Propeller/spinner installation.	2
17.3 **Propeller Pitch Control** Speed control and pitch change methods, mechanical and electrical/electronic; Feathering and reverse pitch; Overspeed protection.	2
17.4 **Propeller Synchronising** Synchronising and synchrophasing equipment.	2
17.5 **Propeller Ice Protection** Fluid and electrical de-icing equipment.	2
17.6 **Propeller Maintenance** Static and dynamic balancing; Blade tracking; Assessment of blade damage, erosion, corrosion, impact damage, delamination; Propeller treatment/repair schemes; Propeller engine running.	2
17.7 **Propeller Storage and Preservation** Propeller preservation and depreservation	2