Oil pressure and temperature;

Exhaust Gas Temperature;

Fuel pressure and flow;

Manifold pressure.

16.11  **Powerplant Installation**

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Configuration of firewalls, cowlings, acoustic panels, engine mounts, anti-vibration mounts, hoses, pipes, feeders, connectors, wiring looms, control cables and rods, lifting points and drains.

16.12  **Engine Monitoring and Ground Operation**

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Procedures for starting and ground run-up;

Interpretation of engine power output and parameters;

Inspection of engine and components: criteria, tolerances, and data specified by engine manufacturer.

16.13  **Engine Storage and Preservation**

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Preservation and depreservation for the engine and accessories/systems.

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**MODULE 17A. PROPELLER**

Note: This module does not apply to category B3. Relevant subject matters for category B3 are defined in module 17B.

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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.

17.2  **Propeller Construction**

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Construction methods and materials 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.

17.3 **Propeller Pitch Control**

1 2

Speed control and pitch change methods, mechanical and electrical/electronic;

Feathering and reverse pitch;

Overspeed protection.

17.4 **Propeller Synchronising**

— 2

Synchronising and synchrophasing equipment.

17.5 **Propeller Ice Protection**

1 2

Fluid and electrical de-icing equipment.

17.6 **Propeller Maintenance**

1 3

Static and dynamic balancing;

Blade tracking;

Assessment of blade damage, erosion, corrosion, impact damage, delamination;

Propeller treatment/repair schemes;

Propeller engine running.

17.7 **Propeller Storage and Preservation**

1 2

Propeller preservation and depreservation.

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**MODULE 17B. PROPELLER**

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

17.1 **Fundamentals**

2

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.