

	LEVEL
	B3
(c) Non-destructive inspection techniques including, penetrant, radiographic, eddy current, ultrasonic and boroscope methods;	2
(d) Disassembly and re-assembly techniques;	2
(e) Trouble shooting techniques.	2
7.19 Abnormal Events	
(a) Inspections following lightning strikes and HIRF penetration.	2
(b) Inspections following abnormal events such as heavy landings and flight through turbulence.	2
7.20 Maintenance Procedures	2
Maintenance planning;	
Modification procedures;	
Stores procedures;	
Certification/release procedures;	
Interface with aircraft operation;	
Maintenance Inspection/Quality Control/Quality Assurance;	
Additional maintenance procedures;	
Control of life limited components.	

MODULE 8. BASIC AERODYNAMICS

	LEVEL			
	A	B1	B2	B3
8.1 Physics of the Atmosphere	1	2	2	1
International Standard Atmosphere (ISA), application to aerodynamics.				
8.2 Aerodynamics	1	2	2	1
Airflow around a body;				
Boundary layer, laminar and turbulent flow, free stream flow, relative airflow, upwash and downwash, vortices, stagnation;				
The terms: camber, chord, mean aerodynamic chord, profile (parasite) drag, induced drag, centre of pressure, angle of attack, wash in and wash out, fineness ratio, wing shape and aspect ratio;				
Thrust, Weight, Aerodynamic Resultant;				
Generation of Lift and Drag: Angle of Attack, Lift coefficient, Drag coefficient, polar curve, stall;				
Aerofoil contamination including ice, snow, frost.				

	LEVEL			
	A	B1	B2	B3
8.3 Theory of Flight	1	2	2	1
Relationship between lift, weight, thrust and drag;				
Glide ratio;				
Steady state flights, performance;				
Theory of the turn;				
Influence of load factor: stall, flight envelope and structural limitations;				
Lift augmentation.				
8.4 Flight Stability and Dynamics	1	2	2	1
Longitudinal, lateral and directional stability (active and passive).				

MODULE 9A. HUMAN FACTORS

Note: This module does not apply to category B3. Relevant subject matters for category B3 are defined in module 9B.

	LEVEL		
	A	B1	B2
9.1 General	1	2	2
The need to take human factors into account;			
Incidents attributable to human factors/human error;			
"Murphy's" law.			
9.2 Human Performance and Limitations	1	2	2
Vision;			
Hearing;			
Information processing;			
Attention and perception;			
Memory;			
Claustrophobia and physical access.			
9.3 Social Psychology	1	1	1
Responsibility: individual and group;			
Motivation and de-motivation;			
Peer pressure;			
"Culture" issues;			