## PART

**MODULE 8** 

Categorie		A1 A2 A3 A4 B3 level	B1 B2 B2L level	Hfst
8.1	<b>Physics of the Atmosphere</b> International Standard Atmosphere (ISA) and its application to aerodynamics.	1	2	1
8.2	Aerodynamics Airflow around a body; Boundary layer, laminar and turbulent flow, free stream flow, relative airflow, upwash en downwash, vortices, stagnation; The terms: camber, chord, mean aerodynamic chord, profi- le (parasite) drag, induced drag, centre of pressure, angle of attack, was-in and was-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.	1	2	1 2 3 begrippen 4 5 7
8.3	<b>Theory of Flight</b> Relationship between lift, weight, thrust and drag; Glide ratio; Steady state flight, performance; Theory of the turn; Influence of load factor: stall, flight envelope and structural limitations; Lift augmentation.	1	2	6 7 9
8.4	<b>High-Speed Flight</b> Speed of sound, subsonic flight, transonic flight, supersonic flight, Mach number, critical Mach number, compressibility buffet, shock wave, aerodynamic heating, area rule; Factors that affect airflow in engine intakes of high-speed aircraft; Effects of sweepback on critical Mach number.	1	2	1 2 7 10
8.5	<b>Flight Stability and Dynamics</b> Longitudinal, lateral and directional stability (active and passive)	1	2	8

## Let op!

Bovenstaande Part66 is vooruitlopend op de nieuwe regelgeving zoals gesteld in opinion No 07-2022 (ref NPA 2020-12).

## U dient op dit moment te studeren, 8.1 t/m 8.3 uit bovenstaande tabel en:

8.4

Flight Stability and Dynamics Longitudinal, lateral and directional stability (active and passive) 1 2

8

## Voor meer informatie verwijzen wij u naar jeweka.nl/errata