

Leading cadet training syllabus

Discipline	Course	ACP	Volume	Number of lessons	Revision lesson	Total lessons
Navigation	Basic Navigation	32	2	7	3	10
Flight	Principles of flight	33	2	9	4	13
Aircraft Operation	Airmanship II	34	2	13	3	16

	Subject	Lesson title	Completed
1.	Basic Navigation	Basic navigation	
2.	Basic Navigation	The compass	
3.	Basic Navigation	The compass	
4.	Basic Navigation	Practical navigation	
5.	Basic Navigation	Weather	
6.	Basic Navigation	Weather	
7.	Basic Navigation	Revision	
8.	Basic Navigation	Revision	
9.	Basic Navigation	Revision	
10.	Basic Navigation	Revision	
11.	Principles of flight	Lift and weight	
12.	Principles of flight	Lift and weight	
13.	Principles of flight	Stalling	
14.	Principles of flight	Thrust and drag	
15.	Principles of flight	Stability and control	
16.	Principles of flight	Stability and control	
17.	Principles of flight	Stability and control	
18.	Principles of flight	Gliding	
19.	Principles of flight	The helicopter	
20.	Principles of flight	Revision	
21.	Principles of flight	Revision	
22.	Principles of flight	Revision	
23.	Principles of flight	Revision	
24.	Airmanship II	Air Traffic Control	
25.	Airmanship II	Air Traffic Control	
26.	Airmanship II	Rules of the Air	
27.	Airmanship II	Aircraft Knowledge	
28.	Airmanship II	Aircraft Knowledge	
29.	Airmanship II	Aircraft Knowledge	
30.	Airmanship II	Aircraft Knowledge	
31.	Airmanship II	Aircraft Knowledge	
32.	Airmanship II	Aircraft Knowledge	
33.	Airmanship II	Aircraft Knowledge	
34.	Airmanship II	Aircraft Knowledge	
35.	Airmanship II	Aircraft Knowledge	
36.	Airmanship II	Aircraft Knowledge	
31.	Airmanship II	Revision	
31.	Airmanship II	Revision	
32.	Airmanship II	Revision – Aircraft Knowledge quiz	

Leading cadet training

ACP 32
Navigation
Volume 2

Basic navigation



Course	Navigation, Basic navigation, ACP32 Volume 2		
Lesson Number	Chapter	Title	Notes
1	1	Basic Navigation	<ol style="list-style-type: none"> 1. Introduction 2. True north or grid north? 3. Setting or orientating your map 4. Finding north without a compass 5. The pole star 6. Using a watch 7. The shadow method 8. Magnetic north 9. Grid magnetic angle
2	2	The compass	<ol style="list-style-type: none"> 1. Introduction 2. Deviation 3. Setting the map with a compass 4. Setting a compass heading
3			<ol style="list-style-type: none"> 1. Walking on a bearing 2. Compass to map 3. Resection 4. Scales and roamers 5. Measuring distances on a map
4		Practical Navigation	<ol style="list-style-type: none"> 1. Measuring distances 2. Timing 3. Pacing 4. Errors
5	3		<ol style="list-style-type: none"> 1. Aids to navigation <ol style="list-style-type: none"> a) Hand railing b) Aiming off c) Contouring d) Attack points
6	4	Weather	<ol style="list-style-type: none"> 1. Introduction 2. Air Masses on the move 3. Main air masses <ol style="list-style-type: none"> a) Polar maritime b) Returning polar maritime c) Tropical maritime d) Tropical continental e) Arctic maritime f) Polar continental
7			<ol style="list-style-type: none"> 1. Fronts and frontal depressions 2. Upper winds 3. Anticyclones 4. Clouds
8		Revision	Test papers as required
9		Revision	Test papers as required
10		Revision	Test papers as required

Leading cadet training

ACP 32
Flight
Volume 2

Principles of flight



Course	Flight, Principles of flight, ACP 33 Volume 2		
Lesson Number	Chapter	Title	Notes
1	1	Lift and Weight	<ol style="list-style-type: none"> 1. Introduction 2. Air as a Substance 3. Moving objects through the air 4. Weight 5. Wind tunnel tests 6. Changes in speed 7. Proving the theory 8. Lift 9. Distribution of lift
2			<ol style="list-style-type: none"> 1. Centre of pressure 2. How lift varies <ol style="list-style-type: none"> a) Airspeed b) Angle of attack c) Air density d) Wing shape and area 3. Lift and weight in straight and level flight
4	2	Thrust and drag	<ol style="list-style-type: none"> 1. Introduction 2. Thrust 3. Drag 4. Variation of drag with airspeed 5. Thrust and total drag in straight and level flight 6. The aircraft in balance
5	3	Stability and control	<ol style="list-style-type: none"> 1. Planes and axes 2. Why stability? <ol style="list-style-type: none"> a) Pitching plane b) Rolling plane c) Yawing plane 3. How much stability 4. The pilots controls
6			<ol style="list-style-type: none"> 5. How the pilot uses the controls <ol style="list-style-type: none"> a) The pitching plane b) The rolling plane c) The Yawing plane 6. Trimming tabs, flaps and slats 7. Controllable trimming tabs
7			<ol style="list-style-type: none"> 1. Flaps 2. Operation 3. Slats
3	4	Stalling	<ol style="list-style-type: none"> 1. Introduction 2. The stall 3. Stalling angle 4. Stalling speed 5. Attitude and the stall
8	5	Gliding	<ol style="list-style-type: none"> 1. Introduction 2. Balance of forces 3. Speed 4. How far will a glider travel 5. Effect of wind 6. Airbrakes
9	6	The helicopter	<ol style="list-style-type: none"> 1. Introduction 2. How a helicopter produces lift 3. Horizontal helicopter flight

			4. Torque reaction 5. Helicopter controls 6. Collective pitch control 7. Hand throttle 8. Cyclic pitch control 9. Tail rotor control
10		Revision	Test papers as required
11		Revision	Test papers as required
12		Revision	Test papers as required
13		Revision	Test papers as required

Leading cadet training

ACP 34
Aircraft operation
Volume 2

Airmanship 2



Course	Aircraft Operation, Airmanship II, ACP 34 Volume 2		
Lesson Number	Chapter	Title	Notes
1	1	Air Traffic Control	<ol style="list-style-type: none"> 1. Introduction 2. The control tower 3. The aerodrome controller 4. The approach controller 5. The runway controller 6. Communications 7. Telephone/tele-talk/radio/visual 8. Helicopter operating areas 9. Airfield hazards and obstruction markings 10. Bad ground
2			<ol style="list-style-type: none"> 1. Communication aids 2. RADAR 3. Radio aids (DRDF & ILS) 4. Radar aids (Surveillance, PAR) 5. Airways 6. Crossing airways
3	2	Rules of the air	<ol style="list-style-type: none"> 1. Introduction 2. Rights of way for different types of aircraft 3. Rights of way for same type aircraft 4. On the ground 5. Rules at night 6. Avoiding other aircraft
4	3	Aircraft Knowledge part 1	<ol style="list-style-type: none"> 1. Introduction 2. Griffen HT1 3. Tutor T1 4. Chinook HC2 5. Self test 1
5		2	<ol style="list-style-type: none"> 1. Canberra PR9 2. Squirrel HT2 & HT2 3. Firefly T67M 4. Self Test 2
6		3	<ol style="list-style-type: none"> 1. Dominie T1, & HS125 CC1, CC2, CC3 2. Hercules C1 & C3 3. Puma HC1 4. Self Test 3
7		4	<ol style="list-style-type: none"> 1. Bae 146 CC2 2. Harrier GR 7 3. Self test 4
8		5	<ol style="list-style-type: none"> 1. VC10 C1, C1K, K2, K3 & K4 2. Jetstream T1 3. Viking T1 4. Self test 5
9		6	<ol style="list-style-type: none"> 1. Jaguar GR1 & T2 2. Nimrod MR2 3. Vigilant T1 4. Self test 6
10		7	<ol style="list-style-type: none"> 1. Tornado GR1, 1A & 1B

			<ul style="list-style-type: none"> 2. Sea King HAR3 3. Merlin MK3 4. Self test 7
11		8	<ul style="list-style-type: none"> 1. Tornado F3 2. Sentry AEW1 3. Typhoon F 4. Self test 8
12		9	<ul style="list-style-type: none"> 1. Tristar K1, KC1 & KC2 2. Tucano T1 3. Hawk T1 & T1A 4. Self test 9
13		10	<ul style="list-style-type: none"> 1. Lancaster B1 (BBMF) 2. Spitfire (BBMF) 3. Hurricane (BBMF) 4. Dakota DC3 (BBMF) 5. Self test 10
14		Revision	Test papers as required
15		Revision	Test papers as required
16		Revision	Aircraft Knowledge quiz