

Syllabus reference	Syllabus details and associated Learning Objectives						
090 00 00 00	COMMUNICATIONS						
091 00 00 00	VFR COMMUNICATIONS (understood as basic information for IFR-procedures)						
091 01 00 00	DEFINITIONS						
091 01 01 00	Meanings and significance of associated terms						
	LO Stations						
	LO Communication methods						
091 01 02 00	Air Traffic Services abbreviations						
	LO Define commonly used Air Traffic Control abbreviations: <ul style="list-style-type: none"> - Flight conditions - Airspace - Services - Time - Miscellaneous 						
091 01 03 00	Q-code groups commonly used in RTF air-ground communications						
	LO Define Q-code groups commonly used in RTF air to ground communications: <ul style="list-style-type: none"> - Pressure settings - Directions and bearings 						
	LO State the procedure for obtaining bearing information in flight						
091 01 04 00	Categories of messages						
	LO List the categories of messages in order of priority						
	LO Identify the types of messages appropriate to each category						
	LO List the priority of a message (given examples of messages to compare)						

Syllabus reference	Syllabus details and associated Learning Objectives						
091 02 00 00	GENERAL OPERATING PROCEDURES (see IFR 092 02)						
091 02 01 00	Transmission of letters						
LO							
LO							
091 02 02 00	Transmission of numbers (including level information)						
LO							
091 02 03 00	Transmission of time						
LO							
091 02 04 00	Transmission technique						
LO							
091 02 05 00	Standard words and phrases (relevant RTF phraseology included)						
LO							
LO							

Syllabus reference	Syllabus details and associated Learning Objectives						
LO							
LO							
LO							
091 02 06 00	Radiotelephony call signs for aeronautical stations including use of abbreviated call signs						
LO	Name the two parts of the call sign of an aeronautical station						
LO	Identify the call sign suffixes for aeronautical stations						
LO	Explain when the call sign may be omitted or abbreviated to the use of suffi x only						
091 02 07 00	Radiotelephony call signs for aircraft including use of abbreviated call signs						
LO	List the three different ways to compose an aircraft call sign						
LO	Describe the abbreviated forms for aircraft call signs						
LO	Explain when aircraft call signs may be abbreviated						
091 02 08 00	Transfer of communication						
LO							
091 02 09 00	Test procedures including readability scale						
LO							

Syllabus reference	Syllabus details and associated Learning Objectives						
LO							
091 02 10 00	Read back and acknowledgement requirements						
LO							
LO							
LO							
LO							
091 02 11 00	Radar procedural phraseology						
LO							
091 03 00 00	RELEVANT WEATHER INFORMATION TERMS (VFR). Understood as basic information for IFR procedures 092 05						
091 03 01 00	Aerodrome weather						
LO	List the contents of aerodrome weather reports and state units of measurement used for each item <ul style="list-style-type: none"> - Wind direction and speed - Variation of wind direction and speed - Visibility - Present weather - Cloud amount and type (including the meaning of CAVOK) - Air temperature and dewpoint - Pressure values (QNH, QFE) - Supplementary information (aerodrome warnings, landing runway, runway conditions, restrictions, obstructions, windshear warnings, etc) 						

Syllabus reference	Syllabus details and associated Learning Objectives						
091 03 02 00	Weather broadcast						
LO	List the sources of weather information available for aircraft in flight						
LO	Explain the meaning of the abbreviations: ATIS, VOLMET						
091 04 00 00	ACTION REQUIRED TO BE TAKEN IN CASE OF COMMUNICATION FAILURE						
LO							
LO							
LO	State the additional information that should be transmitted, in the event of receiver failure						
LO	Identify the SSR code that may be used to indicate communication failure						
LO							
091 05 00 00	DISTRESS AND URGENCY PROCEDURES						
091 05 01 00	Distress (definition – frequencies – watch of distress frequencies – distress signal – distress message)						
LO							
LO							
LO							
LO							
LO							
LO							
LO							
LO							
091 05 02 00	Urgency (definition – frequencies – urgency signal – urgency message)						
LO							
LO							

Syllabus reference	Syllabus details and associated Learning Objectives						
LO							
LO							
LO							
LO							
091 06 00 00	GENERAL PRINCIPLES OF VHF PROPAGATION AND ALLOCATION OF FREQUENCIES						
LO							
LO							
LO							
LO							
LO							
LO							
LO							
LO							
LO							
LO							
092 00 00 00	IFR COMMUNICATIONS						
092 01 00 00	DEFINITIONS						
092 01 01 00	Meanings and significance of associated terms						
LO	As for VFR plus terms used in conjunction with approach and holding procedures						
092 01 02 00	Air Traffic Control abbreviations						
LO	As for VFR plus additional IFR related terms						
092 01 03 00	Q-code groups commonly used in RTF air-ground communications						

Syllabus reference	Syllabus details and associated Learning Objectives						
LO	Define Q-code groups commonly used in RTF air to ground communications: - Pressure settings - Directions and bearings						
LO	State the procedure for obtaining a bearing information in flight						
092 01 04 00	Categories of messages						
LO	List the categories of messages in order of priority						
LO	Identify the types of messages appropriate to each category						
LO	List the priority of a message (given examples of messages to compare)						
092 02 00 00	GENERAL OPERATING PROCEDURES						
092 02 01 00	Transmission of letters						
LO	State the phonetic alphabet used in radiotelephony						
LO	Identify the occasions when words should be spelt						
092 02 02 00	Transmission of numbers (including level information)						
LO	Describe the method of transmitting numbers - Pronunciation - Single digits, whole hundreds and whole thousands						
092 02 03 00	Transmission of time						
LO	Describe the ways of transmitting time - Standard time reference (UTC) - Minutes, minutes and hours, when required						
092 02 04 00	Transmission technique						
LO	Explain the techniques used for making good R/T transmissions						
092 02 05 00	Standard words and phrases (relevant RTF phraseology included)						

Syllabus reference	Syllabus details and associated Learning Objectives						
LO	Define the meaning of standard words and phrases						
LO	Use correct standard phraseology for each phase of IFR flight <ul style="list-style-type: none"> - Pushback - IFR departure - Airways clearances - Position reporting - Approach procedures - IFR arrivals 						
092 02 06 00	Radiotelephony call signs for aeronautical stations including use of abbreviated call signs						
LO	As for VFR						
LO	Name the two parts of the call sign of an aeronautical station						
LO	Identify the call sign suffixes for aeronautical stations						
LO	Explain when the call sign may be abbreviated to the use of suffix only						
092 02 07 00	Radiotelephony call signs for aircraft including use of abbreviated call signs						
LO	As for VFR						
LO	Explain when the suffix "HEAVY" should be used with an aircraft call sign						
LO	Explain the use of the phrase "Change your call sign to . . ."						
LO	Explain the use of the phrase "Revert to flight plan call sign"						
092 02 08 00	Transfer of communication						
LO	Describe the procedure for transfer of communication <ul style="list-style-type: none"> - By ground station - By aircraft 						
092 02 09 00	Test procedures including readability scale; establishment of RTF communication						

Syllabus reference	Syllabus details and associated Learning Objectives						
LO	Explain how to test radio transmission and reception						
LO	State the readability scale and explain its meaning						
092 02 10 00	Read back and acknowledgement requirements						
LO	State the requirement to read back ATC route clearances						
LO	State the requirement to read back clearances related to runway in use						
LO	State the requirement to read back other clearances including conditional clearances						
LO	State the requirement to read back data such as runway, SSR codes etc						
092 02 11 00	Radar procedural phraseology						
LO	Use the correct phraseology for an aircraft receiving a radar service <ul style="list-style-type: none"> - Radar identification - Radar vectoring - Traffic information and avoidance - SSR procedures 						
092 02 12 00	Level changes and reports						
LO	Use the correct term to describe vertical position <ul style="list-style-type: none"> - In relation to flight level (standard pressure setting) - In relation to Altitude (metres/feet on QNH) - In relation to Height (metres/feet on QFE) 						
092 03 00 00	ACTION REQUIRED TO BE TAKEN IN CASE OF COMMUNICATION FAILURE						
LO	Describe the action to be taken in communication failure on an IFR flight						
LO	Describe the action to be taken in case of communication failure on an IFR flight when flying in VMC and the flight will be terminated in VMC						
LO	Describe the action to be taken in case of communication failure on an IFR flight when flying in IMC						

Syllabus reference	Syllabus details and associated Learning Objectives						
092 04 00 00	DISTRESS AND URGENCY PROCEDURES						
092 04 01 00	PAN medical						
	LO Describe the type of flights to which PAN MEDICAL applies						
	LO List the content of a PAN MEDICAL message in correct sequence						
092 04 02 00	Distress (definition – frequencies – watch of distress frequencies – distress signal – distress message)						
	LO State the DISTRESS procedures						
	LO Define DISTRESS						
	LO Identify the frequencies that should be used by aircraft in DISTRESS						
	LO Specify the emergency SSR codes that may be used by aircraft, and the meaning of the codes						
	LO Describe the action to be taken by the station which receives a DISTRESS message						
	LO Describe the action to be taken by all other stations when a DISTRESS procedure is in progress						
	LO List the content of a DISTRESS message						
092 04 03 00	Urgency (definition – frequencies – urgency signal – urgency message)						
	LO State the URGENCY procedures						
	LO Define URGENCY						
	LO Identify the frequencies that should be used by aircraft in URGENCY						
	LO Describe the action to be taken by the station which receives an URGENCY message						
	LO Describe the action to be taken by all other stations when an DISTRESS procedure is in progress						
	LO List the content of an URGENCY signal/message in the correct sequence						
092 05 00 00	RELEVANT WEATHER INFORMATION TERM						
092 05 01 00	Aerodrome weather						

Syllabus reference	Syllabus details and associated Learning Objectives						
LO	As for VFR plus the following						
LO	Runway visual range						
LO	Braking action (friction coefficient)						
092 05 02 00	Weather broadcast						
LO	As for VFR plus the following						
LO	Explain when aircraft routine meteorological observations should be made						
LO	Explain when aircraft Special meteorological observations should be made						
092 06 00 00	GENERAL PRINCIPLES OF VHF PROPAGATION AND ALLOCATION OF FREQUENCIES						
LO	Describe the radio frequency spectrum with particular reference to VHF						
LO	State the names of the bands into which the radio frequency spectrum is divided						
LO	Identify the frequency range of the VHF band						
LO	Name the band normally used for Aeronautical Mobile Service voice communications						
LO	State the frequency separation allocated between consecutive VHF frequencies						
LO	Describe the propagation characteristics of radio transmissions in the VHF band						
LO	Describe the factors which reduce the effective range and quality of radio transmissions						
LO	State which of these factors apply to the VHF band						
LO	Calculate the effective range of VHF transmissions assuming no attenuating factors						
092 07 00 00	MORSE CODE						
LO	State the identification of radio navigation aids (VOR, DME, NDB, ILS) from their morse code identifiers						
LO	SELCAL, TCAS, ACARS phraseology and procedures						

