Toetsmatrijs PPL Communications

In deze toetsmatrijs staat wat u moet kunnen en kennen. De toetsmatrijs vormt daarom de basis van de opleiding en het examen.

Opgesteld door:	**CBR divisie CCV**

Categoriecode:	LVPACOM (PPLA, LAPLA) en LVPHCOM (PPLH, LAPLH) en LVGCCOM (RPLGC) en LVRTCOM (RT)
Toetsvorm:	Digitaal
Totaal aantal vragen:	12 meerkeuzevragen
Cesuur:	75% (9 van de 12 vragen goed)
Bijzonderheden:	Alle leerdoelen die voor PPL(A/H) en LAPL(A/H) van toepassing zijn gelden ook voor Radiotelefonie (RT). Voor RPLGC gelden dezelfde leerdoelen als PPLA.

Nr	Eindtermen
090 00 00 00	**COMMUNICATIONS**
091 01 00 00	Definitions
091 02 00 00	General operating procedures
091 03 00 00	Relevant weather information terms (VFR)
091 04 00 00	Action required to be taken in case of communication failure
091 05 00 00	Distress and urgency procedures
091 06 00 00	General principles of VHF propagation and allocation of frequencies

Vastgesteld door:	Technische Commissie Communications
Beoordeeld door:	Logistiek, Transport en Personenvervoer raad; kamer 3: Luchtvaart <14 september 2018>
Goedgekeurd door:	Divisiemanager CCV <17 september 2018>
Ingangsdatum:	<1 juli 2021>

Datum laatste aanpassing: <1 juli 2021>
Laatst gecontroleerd op: <26 februari 2019>

Toelichting

Eindtermen: Dit zijn de hoofdonderwerpen die in het examen voorkomen. Hierin staat 'ruim' omschreven wat er in het examen terug kan komen.
Toetstermen: Dit zijn onderdelen van een eindterm. Hierin staat meer uitgebreid omschreven wat er in het examen terug kan komen.
Tax: Dit is de taxonomiecode van Romiszowski. Deze code geeft aan op welk niveau de vragen over een toetsterm gesteld worden.
F = Feitelijke kennis. De kandidaat kan feiten reproduceren (herkennen of herinneren).
B = Begripsmatige kennis. De kandidaat kan begrippen of principes omschrijven.
R = Reproductieve vaardigheden. De kandidaat kan acties uitvoeren die volgens een vastgelegde procedure verlopen.
P = Productieve vaardigheden. De kandidaat kan acties uitvoeren waarbij hij zijn eigen creativiteit en inzicht nodig heeft.

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Eind- en toetstermen		Tax	PPLA	PPLH
091 01 00 00	**Definitions**			
091 01 01 00	**Meanings and significance of associated terms**			
LO	Stations.	F	X	X
LO	Communication methods.	F	X	X
091 01 02 00	**Air Traffic Services abbreviations**			
LO	Define commonly used Air Traffic Control abbreviations: - Flight conditions; - Airspace; - Services; - Time; - Miscellaneous.	F	X	X
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: - Pressure settings; - Directions and bearings.	F	X	X
LO	State the procedure for obtaining bearing information in flight.	F	X	X
091 02 00 00	**General operating procedures**			
091 02 01 00	**Transmission of letters**			
LO	State the phonetic alphabet used in radiotelephony.	F	X	X
LO	Identify the occasions when words should be spelt.	B	X	X
091 02 02 00	**Transmission of numbers (including level information)**			
LO	Describe the method of transmission of numbers: - Pronunciation; - Single digits, whole hundreds and whole thousands.	B	X	X
091 02 03 00	**Transmission of time**			
LO	Describe the ways of transmitting time - Standard time reference (UTC); - Minutes, minutes and hours, when required.	B	X	X
091 02 04 00	**Transmission technique**			
LO	Explain the techniques used for making good RTF transmissions.	B	X	X

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Eind- en toetstermen		Tax	PPLA	PPLH
091 02 05 00	**Standard words and phrases (relevant RTF phraseology included)**			
LO	Define the meaning of standard words and phrases.	F	X	X
LO	Use the correct phraseology for each phase of VFR flight.	F	X	X
LO	Describe the following procedures - Departure information; - Taxi instructions; - Aerodrome traffic and circuits; - Final approach and landing; - After landing; - Essential aerodrome information.	B	X	X
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.	F	X	X
LO	Identify the call sign suffixes for aeronautical stations.	B	X	X
LO	Explain when the call sign may be omitted or abbreviated to the use of suffix only.	B	X	X
091 02 07 00	**Radiotelephony call signs for aircraft including use of abbreviated call signs**			
LO	State the three different ways to compose an aircraft call sign.	F	X	X
LO	Describe the abbreviated forms for aircraft call signs.	B	X	X
LO	Explain when aircraft call signs may be abbreviated.	B	X	X
091 02 08 00	**Transfer of communication**			
LO	Describe the procedure for transfer of communication - By groundstation; - By aircraft.	B	X	X
091 02 09 00	**Test procedures including readability scale**			
LO	Explain how to test radio transmission and reception.	B	X	X
LO	State the readability scale and explain its meaning.	F	X	X
091 02 10 00	**Read back and acknowledgement requirements**			
LO	State the requirement to read back clearances related to the runway in use.	F	X	X
LO	State the requirement to read back "other clearances" including conditional clearances.	F	X	X
LO	State the requirements to read back other data such as runway, SSR codes etc.	F	X	X
091 02 11 00	**Radar procedural phraseology**			

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Eind- en toetstermen		Tax	PPLA	PPLH
LO	Use the correct phraseology for an aircraft receiving a surveillance service. - Identification; - Vectoring; - Traffic information and avoidance; - SSR procedures.	F	X	X
091 03 00 00	**Relevant weather information terms (VFR)**			
091 03 01 00	**Aerodrome weather**			
LO	List the contents of aerodrome weather reports and state units of measurement (where applicable) and reference of wind direction (true or magnetic): - Wind direction and speed; - Variation of wind direction and speed; - Visibility; - Present weather; - Cloud amount and type; - Air temperature and dewpoint; - Pressure values (QNH, QFE).	F	X	X
091 03 02 00	**Weather broadcast**			
LO	List the sources of weather information available for aircraft in flight.	F	X	X
LO	Explain the meaning of the abbreviation ATIS and state the contents of an ATIS message.	B	X	X
091 04 00 00	**Action required to be taken in case of communication failure**			
LO	State the action to be taken in case of communication failure on a controlled VFR-flight.	F	X	X
LO	Identify the frequencies to be used in an attempt to establish communication.	B	X	X
LO	State the additional information that should be transmitted, in the event of receiver failure.	F	X	X
LO	Identify the SSR code that may be used to indicate communication failure.	B	X	X
LO	Explain the action to be taken by a pilot with communiation failure in the aerodrome traffic pattern at controlled aerodromes.	B	X	X
091 05 00 00	**Distress and urgency procedures**			
091 05 01 00	**Distress (definition – frequencies – watch of distress frequencies – distress signal – distress message)**			
LO	State the DISTRESS procedures.	F	X	X
LO	Define DISTRESS.	F	X	X
LO	Identify the frequencies that should be used by aircraft in DISTRESS.	B	X	X

Eind- en toetstermen		Tax	PPLA	PPLH
LO	Specify the emergency SSR codes that may be used by aircraft, and the meaning of the codes.	B	X	X
LO	Describe the action to be taken by an aircraft which receives a DISTRESS message.	B	X	X
LO	Describe the action to be taken by all other stations when a DISTRESS procedure is in progress.	B	X	X
LO	List the content of a DISTRESS signal/message in the correct sequence.	F	X	X
091 05 02 00	**Urgency (definition – frequencies – urgency signal – urgency message)**			
LO	State the URGENCY procedures.	F	X	X
LO	Define URGENCY.	F	X	X
LO	Identify the frequencies that should be used by aircraft in URGENCY.	B	X	X
LO	Describe the action to be taken by an aircraft which receives an URGENCY message.	B	X	X
LO	Describe the action to be taken by all other stations which receives an URGENCY message.	B	X	X
LO	List the content of an URGENCY signal/message in the correct sequence.	F	X	X
091 06 00 00	**General principles of VHF propagation and allocation of frequencies**			
LO	State the VHF frequency range used for Aeronautical Mobile Service voice communication.	F	X	X
LO	Describe the propagation characteristics of radio transmissions in the VHF band.	B	X	X
LO	Describe factors which reduce the effective range and quality of radio transmissions in the VHF band.	B	X	X
LO	Calculate the effective range of VHF transmissions assuming no attenuating factors.	R	X	X

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Wijzigingen toetsmatrijs LVPACOM

Wijzigingen leerdoelen versie 26-02-2019 (t.o.v. versie 30-11-2012):

Algemene wijziging:
- De kolom met 'opmerkingen' is verwijderd. Alle informatie die (niet) geldt voor PPL staat (niet) in de LO's.

Grote wijzigingen:
- 090 01 04 00 'Categories of messages' is vervallen.
- 091 02 10 00 eerste LO: ook voor PPLH (was alleen PPLA).
- 091 02 10 00 derde LO: ook voor PPLA (was alleen PPLH).
- 091 06 00 00: leerdoel 1 (Describe the radio frequency spectrum with particular reference to VHF), 2 (Describe the radio frequency spectrum of the bands into which the radio frequency spectrum is divided), 3 (Identify the frequency range of the VHF band), 5 (State the frequency separation allocated between consecutive VHF frequencies) en 8 (State which of these factors apply to the VHF band) zijn verwijderd.

Kleine wijzigingen:
- 091 02 05 00 derde LO: 'aerodrome procedures' is vervangen door 'describe the following procedures'.
- 091 02 07 00 eerste LO: 'list' is vervangen door 'state'.
- 091 03 01 00 eerste LO: 'list the contents of aerodrome weather reports and state units of measurement used for each item' is vervangen door 'list the contents of aerodrome weather reports and state units of measurement (where applicable) and reference of wind direction (true or magnetic).
- 091 03 02 00 tweede LO: 'explain the meaning of the abbreviations: ATIS, VOLMET' is vervangen door 'explain the meaning of the abbreviation ATIS and state the contents of an ATIS message'.
- 091 05 01 00 vijfde LO: station is vervangen door aircraft.

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