Appendix II—Private Pilot Licence Written Examination Syllabus

Subject No. 2 Flight Radiotelephony

Each subject has been given a subject number and each topic within that subject a topic number. These reference numbers will be used on knowledge deficiency reports and will provide valuable feedback to the examination candidate.

Sub Topic	Syllabus Item
2.2	Basic Radio Wave Propagation
2.2.2	Describe the basic characteristics of High Frequency (HF) and Very High Frequency (VHF) in terms of:
	(a) range;
	(b) surface interference;
	(c) clarity of reception.
	Radio Equipment
2.4	Transceivers
2.4.2	Describe the purpose, correct manipulation and adjustment of the controls of commonly used aeronautical transceivers.
2.4.4	Describe the correct operation of:
	(a) the headset/boom microphone combination; and
	(b) the handheld microphone.
2.6	SSR Transponders
2.6.2	Describe the manipulation and adjustment of the controls of commonly used transponders.
2.6.4	Describe the function of the following terms, and explain the procedures to transmit:
	(a) Mode A information; and
	(b) Mode C information.
2.6.6	State the emergency codes and explain when they should be used.
2.6.8	Demonstrate proficiency in transponder terminology and describe the actions and responses expected from a pilot, following ATC transponder instructions.
2.6.10	List the documents that identify transponder mandatory airspace.
2.6.12	Describe the procedures for operations in transponder mandatory airspace when the aircraft transponder is inoperative.
2.8	Emergency Locator Transmitter (ELT, aka ELBA or ELB).
2.8.2	State the frequency(ies) on which the ELT transmits.

Sub Topic	Syllabus Item
2.8.4	State the requirements for the carriage of an ELT.
2.8.6	Explain how an ELT can be activated:
	(a) automatically in the event of an impact; and
	(b) manually.
2.8.8	Describe the management of the ELT following a forced landing.
2.8.10	Describe the requirements associated with ELT testing.
2.8.12	Explain the procedures to follow in the case of inadvertent ELT activation.
2.10	Practices and Rules
2.10.2	Demonstrate proficiency in transmitting and receiving spoken messages competently and in accordance with prescribed procedures, including
	(a) language to be used;
	(b) word spelling;
	(c) transmission of numerals;
	(d) procedure words and phrases;
	(e) time system;
	(f) establishment of communications;
	(g) frequencies to be used;
	(h) identification of service;
	(i) radiotelephony aircraft callsigns;
	(j) procedures for exchange of messages;
	(k) corrections and repetition tests;
	(l) listening out;
	(m) readability scale.
2.10.4	Demonstrate a good working knowledge of the following Civil Aviation Rules:
	(a) Part 91.217 (5);
	(b) Part 91.243;
	(c) Part 91.245 (b), (c) and (d);
	(d) Part 91.247;
	(e) Part 91.249 (a) and (b);
	(f) Part 91.513;

Sub Topic Syllabus Item

- (g) Part 91.515;
- (h) Part 91.529.
- 2.10.6 AIPNZ Volume 1, describe the radio procedures, requirements, and functions associated with:
 - (a) UNICOM;
 - (b) ATIS;
 - (c) AFRU;
 - (d) AWIB.
- 2.10.8 AIPNZ demonstrate a good working knowledge of the phraseology used for, and by, VFR aircraft.
- 2.10.10 Demonstrate a good working knowledge of the AIPNZ and AC172-1 with regard to:
 - (a) communication services;
 - (b) communication aspects in the Search and Rescue section.

2.12 Phraseology and Procedures

- 2.12.2 Demonstrate proficiency in standard radiotelephony phraseologies and procedures for:
 - (a) all VFR operations in controlled and uncontrolled airspace;
 - (b) taxi, take-off, approach and landing at controlled aerodromes, Flight Service aerodromes, aerodromes served by UNICOM, and uncontrolled aerodromes; and
 - (c) read-back instructions.
- 2.12.4 State the limitations on pilots with regard to:
 - (a) unauthorised transmissions;
 - (b) secrecy of communications.

2.14 Distress and Urgency Communications

- 2.14.2 Describe the degrees of emergency that warrant:
 - (a) a distress call (MAYDAY); and
 - (b) an urgency call (PAN PAN).
- 2.14.4 Explain the procedures and phraseology involved in transmitting a MAYDAY and PAN call with emphasis on:
 - (a) radio frequencies;
 - (b) station(s) to call;

Sub Topic Syllabus Item (c) contents of the call; (d) enforcing radio silence. 2.14.6 Describe the actions by stations not involved in the emergency with regard to: (a) radio silence; and (b) provision of assistance. 2.14.8 Describe the procedure involved in terminating emergency communications. 2.16 **Loss of Communications - Aircraft Equipment** 2.16.2 Describe the checks that should be followed when becoming aware of an aircraft communication system failure, including a check of: (a) radio power source; (b) function settings (frequency, squelch and similar); (c) microphone or headset. 2.16.4 Detail the actions to be taken when experiencing loss of communications in: (a) controlled airspace; (b) uncontrolled airspace; (c) special use airspace. 2.16.6 Describe corrective actions that could be taken, including: (a) change of frequency or station; (b) transmitting blind; (c) increase in altitude. 2.16.8 Detail the speechless technique using unmodulated transmissions. 2.16.10 State the meaning of light signals used by ATC. 2.18 **Loss of Communications - ATS Equipment Failure** 2.18.2 State the occasions when TIBA (traffic information broadcasts by aircraft) might be introduced. 2.18.4 Detail the TIBA procedures with respect to: (a) VHF frequencies to be used;

(b) listening watch;

(c) times of broadcasts.

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