010-07-06

Emergencies, communication failure and contingencies: key figures

17 figures in 5 groups. Read the cue, say the figure, then check. Each group ends with a recap.
Rules change: check the regulation in force.

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Transponder code for an emergency

7700

Unless ATC has assigned a code.

Transponder code after failed radio attempts

7600

All flights, once the attempts to restore contact fail.

Transponder code for unlawful interference

7500

Tried first. Code 7700 if circumstances warrant.

Transponder code for IFR with radio failure that continues in VMC

7601

IFR only. Land at the nearest suitable aerodrome.

VHF emergency frequency

121.5 MHz

Genuine emergencies only.

Codes and frequency: recap

CUE	FIGURE	DETAIL
Transponder code for an emergency	**7700**	Unless ATC has assigned a code.
Transponder code after failed radio attempts	**7600**	All flights, once the attempts to restore contact fail.
Transponder code for unlawful interference	**7500**	Tried first. Code 7700 if circumstances warrant.
Transponder code for IFR with radio failure that continues in VMC	**7601**	IFR only. Land at the nearest suitable aerodrome.
VHF emergency frequency	**121.5 MHz**	Genuine emergencies only.

> **Emergency 7700, radio failure 7600, interference 7500, IFR in VMC 7601.**

Opening word of a distress message

3 times

MAYDAY, preferably. Distress includes a fuel emergency.

Opening word of an urgency message

3 times

PAN PAN, preferably.

Blind transmission with no contact by any means

2 times

Send the message twice, preceded by TRANSMITTING BLIND.

Blind transmission after receiver failure

Message + 1 repetition

Preceded by TRANSMITTING BLIND DUE TO RECEIVER FAILURE. Sent at scheduled times or positions.

Signals and repetitions: recap

CUE	FIGURE	DETAIL
Opening word of a distress message	**3 times**	MAYDAY, preferably. Distress includes a fuel emergency.
Opening word of an urgency message	**3 times**	PAN PAN, preferably.
Blind transmission with no contact by any means	**2 times**	Send the message twice, preceded by TRANSMITTING BLIND.
Blind transmission after receiver failure	**Message + 1 repetition**	Preceded by TRANSMITTING BLIND DUE TO RECEIVER FAILURE. Sent at scheduled times or positions.

> **Distress says MAYDAY. Urgency says PAN PAN. Each is said three times.**

IFR radio failure, keep the last assigned speed and level for how long?

20 min

Or the minimum flight altitude if higher. Counted from a missed report or from squawking 7600.

IFR radio failure, land within how long after the ETA or the last acknowledged EAT?

30 min

Whichever is later. IFR only.

Arrival aerodrome, ATC informs operators after a missing report

30 min

After the latest of the pilot ETA, ACC ETA or last acknowledged EAT.

ICAO only, IFR radio failure in surveillance airspace

7 min

SERA uses 20 min, and the EU rule is in force. The 7 min figure is ICAO.

Radio-failure times: recap

CUE	FIGURE	DETAIL
IFR radio failure, keep the last assigned speed and level for how long?	**20 min**	Or the minimum flight altitude if higher. Counted from a missed report or from squawking 7600.
IFR radio failure, land within how long after the ETA or the last acknowledged EAT?	**30 min**	Whichever is later. IFR only.
Arrival aerodrome, ATC informs operators after a missing report	**30 min**	After the latest of the pilot ETA, ACC ETA or last acknowledged EAT.
ICAO only, IFR radio failure in surveillance airspace	**7 min**	SERA uses 20 min, and the EU rule is in force. The 7 min figure is ICAO.

> **Twenty to hold, thirty to land. Seven is ICAO only.**

Emergency descent guidance over normal terrain, clearance above obstacles

1 000 ft

1 000 ft above all obstacles in the area.

Emergency descent guidance in designated mountainous terrain, clearance above obstacles

2 000 ft

2 000 ft above all obstacles in the area.

Emergency descent and levels: recap

CUE	FIGURE	DETAIL
Emergency descent guidance over normal terrain, clearance above obstacles	**1 000 ft**	1 000 ft above all obstacles in the area.
Emergency descent guidance in designated mountainous terrain, clearance above obstacles	**2 000 ft**	2 000 ft above all obstacles in the area.

> **Normal terrain 1 000 ft. Mountains 2 000 ft.**

Emergency separation where the 1 000 ft minimum applies

500 ft

Half the vertical minimum, when horizontal separation cannot be kept.

Emergency separation where the 2 000 ft minimum applies

1 000 ft

Half the vertical minimum, when horizontal separation cannot be kept.

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Emergency descent and levels, ATC separation: recap

CUE	FIGURE	DETAIL
Emergency separation where the 1 000 ft minimum applies	**500 ft**	Half the vertical minimum, when horizontal separation cannot be kept.
Emergency separation where the 2 000 ft minimum applies	**1 000 ft**	Half the vertical minimum, when horizontal separation cannot be kept.

> **Emergency separation: half of each. 500 ft and 1 000 ft.**