

29 Communications from Aircraft: Distress, Urgency and Safety Signals

The following is an extract from *Air Navigation Order*, Series V, No. 6, and other documents:

- 1 None of the provisions in this order shall prevent the use, by an aircraft in distress, of any means at its disposal to attract attention, make known its position and obtain help.

Distress Signals

- 2 The following signals, used either together or separately, mean that grave and imminent danger threatens, and immediate assistance is requested:
 - (a) a signal made by radio/telegraphy or by any other signalling method consisting of the group . . . - - - . . . in Morse Code
 - (b) a signal sent by radio/telephony consisting of the spoken word *Mayday*,
 - (c) rockets or shells throwing red lights, fired one at a time at short intervals,
 - (d) a parachute flare showing a red light,
 - (e) the two-flag signal corresponding to the letters NC of the International Code of Signals,
 - (f) a signal consisting of a square flag having above it or below it a ball or anything resembling a ball,
 - (g) a gun or other explosive signal fired at intervals of about a minute,
 - (h) a smoke signal giving off a volume of orange-coloured smoke.
- 3 The following procedures performed in sequence by an aircraft shall mean that the aircraft is directing a vessel towards an aircraft, ship or person in distress:
 - (a) circling the vessel at least once;
 - (b) crossing the projected course of the vessel close ahead at a low altitude while rocking the wings (opening and closing the throttle or changing the propeller pitch may be used instead but is less effective);
 - (c) heading in the direction in which the vessel is to be directed; and
 - (d) if the vessel does not respond, a, b, and c shall be repeated with the same meaning.
- 4 The following procedure performed by an aircraft shall mean that the assistance of the vessel to which the signal is directed is no longer required: crossing the wake of the surface craft close astern at low altitude while rocking the wings (opening or closing the throttle or changing the propeller pitch may be used instead but is less effective).

Urgency Signals

- 5 (1) The following signals, used either together or separately, mean that an aircraft wishes to give notice of difficulties which compel it to land without requiring immediate assistance:
 - (a) the repeated switching on and off of the landing lights,
 - (b) the repeated switching on and off of the navigation lights,
 - (c) a succession of white pyrotechnical lights.

- (2) The following signals, used either together or separately, mean that an aircraft has a very urgent message to transmit concerning the safety of a ship, aircraft or other vehicle, or some person on board or within sight:
- (a) in radio/telegraphy, three repetitions of the group XXX, sent with the letters of each group, and the successive groups clearly separated from each other;
 - (b) in radio/telephony, three repetitions of the expression PAN PAN;
 - (c) a succession of green pyrotechnical lights;
 - (d) a succession of green flashes with signal apparatus.

Safety Signals

- 6** The following signals, used either together or separately, mean that an aircraft is about to transmit a message concerning the safety of navigation or giving important meteorological warnings:
- (a) in radio/telegraphy, three repetitions of the group TTT, sent with the letters of each group and the successive groups clearly separated from each other;
 - (b) in radio/telephony, the word SECURITE pronounced as the French word *SÉCURITÉ*, repeated three times, (to which correspond in English pronunciation the syllables SAYCURE-E-TAY).

Note: Annex IV 1(l) and (m) of Schedule I of *the Collision Regulations* provides for a radio signal for use by aircraft in distress for the purpose of actuating the auto-alarms of vessels and thus securing attention to distress calls or messages. The radiotelegraphy alarm signal consists of a series of 12 dashes, sent in 1 minute, the duration of each dash being 4 seconds, and the duration of the interval between 2 consecutive dashes, 1 second. The radiotelephone alarm signal consists of 2 sinusoidal tones (2200 and 1300 Hz) transmitted alternately, with each tone lasting 250 milliseconds, and sent for a period of at least 30 seconds but not exceeding 1 minute. To differentiate between coast stations and ship transmissions, the coast station alarm signal shall end in a continuous tone of 1300 Hz, lasting 10 seconds.

Authority:

Article 36 of the International Telegraphic Union Radio Regulations (Nos. 1463, 1464, 1465).

Authority: Canadian Coast Guard