

## 29 Communications from Aircraft: Distress, Urgency and Safety Signals

The following is an extract from the Canada Flight Supplement (CFS) and the Aeronautical Information Manual (AIM) 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:

#### Airborne

- (a) a signal made by radiotelegraphy or by any other signalling method consisting of the group . . . - - - . . . in Morse Code
- (b) a signal sent by radiotelephony consisting of the spoken word *Mayday*, (3 times),
- (c) When lost or in distress and unable to make radio contact, aircraft will fly two triangles as depicted, resume course, repeat at 5 minute intervals.

Figure 4.1—Radar Alerting Manoeuvres



#### From the Ground

- (a) rockets or shells throwing red lights, fired one at a time at short intervals,
  - (b) a parachute flare showing a red light,
  - (c) a smoke signal giving off a volume of orange-coloured smoke.
- 3 Signals used by aircraft engaged in search and rescue operations to direct ships towards an aircraft, ship or person in distress:
    - (a) CIRCLE the vessel at least once,
    - (b) CROSS the vessel's projected course close AHEAD at low altitude while ROCKING the wings. (Opening and closing the throttle or changing the propeller pitch may also be practiced as an alternative means of attracting attention to that of rocking wings. This form of sound signal may be less effective.)
    - (c) HEAD in the direction in which vessel is to be directed; and,
    - (d) if the vessel does not respond, repeat the manoeuvres described in (a), (b) and (c), with the same meaning.

Note: Opening and closing the throttle or changing the propeller pitch may also be practiced as an alternative means of attracting attention to that of rocking wings. However, this form of sound signal may be less effective than the visual signal of rocking the wings owing to high noise level on board the vessel.

### **Urgency Signals**

- 4 (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; or
  - (b) the repeated switching on and off of the navigation lights in such manner as to be distinct from flashing navigation 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 radiotelephony, three repetitions of the expression PAN PAN.

#### Reference:

Annex 2 to the Convention on International Civil Aviation, Rules of the Air, Appendix 1. Signals, July 2005  
Canada Flight Supplement  
Aeronautical Information Manual, TC-1005920

Authority: Canadian Coast Guard