Conference on Search and Rescue

(Saint Denis de La Réunion, September 3 – 7, 2007)

WP/10 – Draft Regulation Respecting the Carriage of Emergency Locator Transmitters (ELT)

(Original text in the French language)

Order Respecting the Mandatory Carriage of Distress Beacons

The Minister Responsible for Air Transportation,

Considering the Convention on International Civil Aviation signed in Chicago on December 7, 1944, and all subsequent amendments thereof;

[Considering the Civil Aviation Code of _____;

Considering the Order of _____, as amended, respecting conditions for use of civil aircraft in general aviation;

Considering the Order of _____, as amended, respecting technical requirements for the operation of aircraft by public air carriers (OPS 1);

Considering the Order of _____ respecting ultra-light motorized aircraft (ULM);

Considering the Order of _____ respecting technical requirements for the operation of helicopters by public air carriers (OPS 3);

[All other relevant recitals as the local situation may warrant]

hereby orders as follows:

Article 1 – Definitions

Cospas-Sarsat: International search and rescue assistance program using satellites to detect and locate distress beacons.

Emergency Locator Transmitter (international acronym: ELT): Generic term designating a device that emits distinctive signals over designated frequencies, and which, depending on particular applications, may either be turned on automatically following impact or be turned on manually. Any of the following devices may serve as an ELT:

- **Automatic fixed ELT** (international acronym: ELT/AF): ELT that is permanently attached to an aircraft, and that is turned on automatically.
- **Automatic portable ELT** (international acronym: ELT/AP): ELT that is rigidly attached to an aircraft but readily removable from the aircraft, and that is turned on automatically.
- **Automatically deployable ELT** (international acronym: ELT/AD): ELT that is rigidly attached to an aircraft and that is deployed and turned on automatically upon impact and, in certain cases, by hydrostatic sensors. Manual deployment is also provided.
- **Survival Emergency Locator Transmitter** (international acronym: ELT/S): ELT that is removable from an aircraft, stowed so as to facilitate its ready use in an emergency, and turned on manually by survivors.

Personal Locator Beacon (international acronym: PLB): autonomous and portable distress beacon operating in the 406 MHz frequency range and that is manually activated by survivors.

Article 2 – Applicability
[At this stage, several alternatives may be considered:

1. *Territorial applicability – this order may apply:*
    a) *to aircraft registered in the civil aircraft registry of the State adopting this order; and/or*
    b) *to all aircraft travelling in:*
        i) *the flight information region for which the State is responsible; and/or*
        ii) *the airspace above the territory of the State*

2. *Types of aircraft concerned*

The authorities of the State adopting this order must decide as to the type of aircraft to which the order will apply (commercial aircraft, general, ULM, gliders, etc.).

NB: It is important to note that the provisions of Appendix 12 only concern certain types of aircraft. However, the State adopting this order must include provisions for the mandatory carriage of beacons by all aircraft registered in its registry and/or that use its airspace or the FIR for which it is responsible.
The State therefore has significant leeway. The provisions presented in this sample order are intended essentially as a guide.

For example: Article 1 could be stated as follows:

The provisions of this order are applicable to all general circulation aircraft registered in the civil aircraft registry of _____ [State adopting this Order] and to Ultra-Light Motorized (ULM) aircraft identified in _____ [State adopting this Order].
These provisions are also applicable to foreign aircraft travelling in the flight information region of _____ [State adopting this Order][1].]

Article 3
All commercially operated aircraft shall be equipped:

- with at least _____ *[to be specified by the State adopting this order; for example: two]* ELTs, including _____ *[to be specified by the State adopting this order; for example: one]* automatic, if it is undertaking long-distance flights including flights over water;
- with at least _____ *[to be specified by the State adopting this order; for example: one automatic ELT]*, in other cases.

All commercially operated helicopters shall be equipped:

- with at least _____ *[to be specified by the State adopting this order; for example: one automatic ELT]* and at least _____ *[to be specified by the State adopting this order; for example: one ELT/S in a lifeboat if it is undertaking flights over water (Performance classes 1 and 2) and for private use (Performance class 3)]*;

- with at least _____ *[to be specified by the State adopting this order; for example: one automatic ELT]*, in other cases.

All general aviation aircraft shall be equipped with _____ *[to be specified by the State adopting this order; for example: one automatic ELT]*, as of _____ *[to be specified by the State adopting this order; for example: January 1, 2008].*

All general aviation helicopters shall be equipped:

[1] As defined in the Air Navigation Plan published by the International Civil Aviation Organization.

- with at least _____ *[to be specified by the State adopting this order; for example: one automatic ELT]* and at least _____ *[to be specified by the State adopting this order; for example: one ELT/S in a lifeboat if it is undertaking flights over water (Performance classes 1 and 2) and for private use (Performance class 3)]*;

- with at least _____ *[to be specified by the State adopting this order; for example: one automatic ELT]*, in other cases.

Gliders – ULM
[To be specified by the State adopting this order; for example: The installation of an ELT/S or a PLB is mandatory on all glider- or ULM-type aircraft].

Article 4
Each distress beacon operating in the 406 MHz frequency range shall be assigned a unique code identifying it or identifying the aircraft carrying it. The distress beacon shall be coded according to the aviation user protocol or one of the user protocols described in Appendix 10 of the Convention on International Civil Aviation, Volume III, Part 2, Appendix 1 of Chapter 5.

For emergency location transmitters to be used in aircraft registered in the civil aircraft registry of _____ *[State adopting this order]*, the Nationality Code is _____ *[code assigned by the Cospas-Sarsat Secretariat[2]]*.
The only coding used is _____ *[to be specified by the State adopting this order; for example: the aircraft registration code, with no spaces or dashes (e.g.: 6VAHU, not 6V-AHU)]*.

If the aircraft is equipped with two emergency locator transmitters, then the coding will be as follows:
- Registration number of the aircraft followed by "/1" for the first transmitter;
- Registration number of the aircraft followed by "/2" for the second transmitter.

For unregistered aircraft, the digital message of the transmitter (ELT or PLB) will contain the transmitter's serial number.

The ELT or PLB owner is required to register them on the _____ *[to be specified by the State adopting this order (national registry or international Cospas-Sarsat registry; for example: the 406 MHZ international beacon registration database (IBRD: International 406 MHz Beacon Registration Database) maintained by the Cospas-Sarsat Secretariat]*. This registration procedure *[in cases where the IBRD option is selected]* must be done through the Internet, at the following address: www.406registration.com. The Cospas-Sarsat Secretariat only allows online Internet beacon submissions made through the IBRD Website. Paper registration forms or registration by any other method is not accepted.

In the event of the destruction or of a change in ownership of the ELT or the PLB, the person (physical or legal) who carried out the registration is responsible for removing the beacon from the international registry. In the event of a change in ownership, the new owner, if this Order applies to him, must carry out the steps stipulated in the preceding paragraph.

Article 5
This Order shall come into effect on _____ *[to be specified by the State adopting this order; for example: January 1, 2008]*.

[2] Cospas-Sarsat Data distribution plan – doc. c/s a.001

Article 6
The Director General of _____ *[for example: the National Civil Aviation Directorate or Agency]* is responsible for implementing this order, which shall be published in the *Official Gazette* of _____ *[State adopting this order]*.

Done at _____

The Minister Responsible for Air Transportation