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ATS 委員会技術情報

ICAO Annex 10 の遭難通信および緊急通信の規定（その1改） (MAYDAY および PAN PAN に関する規定：ICAO 英語版)

インターネットが便利に使える世の中になり、一般的には多種の資料が簡単に手に入るようになってきました。しかしながら航空に関するものは、日本語で読めるものに関してかどうか確信はありませんが、不確かなものが多いと感じています。その最たる例が、MAYDAY を前置する遭難通信および PAN PAN を前置する緊急通信かと思われます。

原則論を少し述べます。世界中で電波を発する行為は、（携帯電話、無線 LAN なども含め）全て International Telecommunication Union (ITU) という国連の専門機関の規則に従うことになっており、ITU の規則 Radio Regulation (RR) を元に電波法その他の国内規則が定められています。しかし ITU の RR は航空に関する部分は意図的に少なくされており、「政府間で別途協定があるものについては、それに従って良い」旨の記述があります。その Foot Note に「例として航空通信については国際民間航空機関 (ICAO：同じく国連の専門機関) に定めがある」とあります。

つまり航空に関するものは、主として ICAO Annex 10 に書かれています。しかしながら ICAO Annex は差し替え式のものは購入が面倒であり、ダウンロード1年分の購読料は、Annex 全体で US\$ 2,500、Air Traffic Management に関する一式が US\$ 1,014 です。それゆえ個人で購入される方は殆どおられないと思います。

このため、遭難通信および緊急通信に関し正確な情報が行き渡っていないと感じ、続く頁に ICAO Annex 10、Vol 2、Seventh Edition, Amendment 90 (Applicable 10 Nov. 2016) の 5.3 Distress and Urgency Radiotelephony Communication Procedures を添付しました。内容的には Technical Information No.38-T01 と同じですが、段組が変更され見やすくなっています。

なお ICAO Annex 10 の日本語訳は出版されていませんので、Technical Information No.38-T02 の抄訳を参考としてください。

(注) ICAO Annex は、国連の公用語である英語、フランス語、スペイン語、ロシア語、アラビア語、中国語の版があります。このため表題の括弧内には英語版と示しています。

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5.3 DISTRESS AND URGENCY RADIOTELEPHONY COMMUNICATION PROCEDURES

5.3.1 General

Note.— The distress and urgency procedures contained in 5.3 relate to the use of radiotelephony. The provisions of Article S30 and Appendix S13 of the ITU Radio Regulations are generally applicable, except that S30.9 permits other procedures to be employed where special arrangements between governments exist, and are also applicable to radiotelephony communications between aircraft stations and stations in the maritime mobile service.

5.3.1.1 Distress and urgency traffic shall comprise all radiotelephony messages relative to the distress and urgency conditions respectively. Distress and urgency conditions are defined as:

- a) *Distress*: a condition of being threatened by serious and/or imminent danger and of requiring immediate assistance.
- b) *Urgency*: a condition concerning the safety of an aircraft or other vehicle, or of some person on board or within sight, but which does not require immediate assistance.

5.3.1.2 The radiotelephony distress signal MAYDAY and the radiotelephony urgency signal PAN PAN shall be used at the commencement of the first distress and urgency communication respectively.

5.3.1.2.1 At the commencement of any subsequent communication in distress and urgency traffic, it shall be permissible to use the radiotelephony distress and urgency signals.

5.3.1.3 The originator of messages addressed to an aircraft in distress or urgency condition shall restrict to the minimum the number and volume and content of such messages as required by the condition.

5.3.1.4 If no acknowledgement of the distress or urgency message is made by the station addressed by the aircraft, other stations shall render assistance, as prescribed in 5.3.2.2 and 5.3.3.2 respectively.

Note.— “Other stations” is intended to refer to any other station which has received the distress or urgency message and has become aware that it has not been acknowledged by the station addressed.

5.3.1.5 Distress and urgency traffic shall normally be maintained on the frequency on which such traffic was initiated until it is considered that better assistance can be provided by transferring that traffic to another frequency.

Note.— 121.5 MHz or alternative available VHF or HF frequencies may be used as appropriate.

5.3.1.6 In cases of distress and urgency communications, in general, the transmissions by radiotelephony shall be made slowly and distinctly, each word being clearly pronounced to facilitate transcription.

5.3.2 Radiotelephony distress communications

5.3.2.1 ACTION BY THE AIRCRAFT IN DISTRESS

5.3.2.1.1 In addition to being preceded by the radiotelephony distress signal MAYDAY (*see* 5.3.1.2), preferably spoken three times, the distress message to be sent by an aircraft in distress shall:

- a) be on the air-ground frequency in use at the time;
- b) consist of as many as possible of the following elements spoken distinctly and, if possible, in the following order:
 - 1) name of the station addressed (time and circumstances permitting);
 - 2) the identification of the aircraft;
 - 3) the nature of the distress condition;
 - 4) intention of the person in command;

5) present position, level (i.e. flight level, altitude, etc., as appropriate) and heading.

Note 1.— The foregoing provisions may be supplemented by the following measures:

- a) *the distress message of an aircraft in distress being made on the emergency frequency 121.5 MHz or another aeronautical mobile frequency, if considered necessary or desirable. Not all aeronautical stations maintain a continuous guard on the emergency frequency;*
- b) *the distress message of an aircraft in distress being broadcast, if time and circumstances make this course preferable;*
- c) *the aircraft transmitting on the maritime mobile service radiotelephony calling frequencies;*
- d) *the aircraft using any means at its disposal to attract attention and make known its conditions (including the activation of the appropriate SSR mode and code);*
- e) *any station taking any means at its disposal to assist an aircraft in distress;*
- f) *any variation on the elements listed under 5.3.2.1.1 b), when the transmitting station is not itself in distress, provided that such circumstance is clearly stated in the distress message.*

Note 2.— The station addressed will normally be that station communicating with the aircraft or in whose area of responsibility the aircraft is operating.

5.3.2.2 ACTION BY THE STATION ADDRESSED OR FIRST STATION ACKNOWLEDGING THE DISTRESS MESSAGE

5.3.2.2.1 The station addressed by aircraft in distress, or first station acknowledging the distress message, shall:

- a) immediately acknowledge the distress message;
- b) take control of the communications or specifically and clearly transfer that responsibility, advising the aircraft if a transfer is made;
- c) take immediate action to ensure that all necessary information is made available, as soon as possible, to:
 - 1) the ATS unit concerned;
 - 2) the aircraft operating agency concerned, or its representative, in accordance with pre-established arrangements;

Note.— The requirement to inform the aircraft operating agency concerned does not have priority over any other action which involves the safety of the flight in distress, or of any other flight in the area, or which might affect the progress of expected flights in the area.

- d) warn other stations, as appropriate, in order to prevent the transfer of traffic to the frequency of the distress communication.

5.3.2.3 IMPOSITION OF SILENCE

5.3.2.3.1 The station in distress, or the station in control of distress traffic, shall be permitted to impose silence, either on all stations of the mobile service in the area or on any station which interferes with the distress traffic. It shall address these instructions “to all stations”, or to one station only, according to circumstances. In either case, it shall use:

- STOP TRANSMITTING;
- the radiotelephony distress signal MAYDAY.

5.3.2.3.2 The use of the signals specified in 5.3.2.3.1 shall be reserved for the aircraft station in distress and for the station controlling the distress traffic.

5.3.2.4 ACTION BY ALL OTHER STATIONS

5.3.2.4.1 The distress communications have absolute priority over all other communications, and a station aware of them shall not transmit on the frequency concerned, unless:

- a) the distress is cancelled or the distress traffic is terminated;
- b) all distress traffic has been transferred to other frequencies;
- c) the station controlling communications gives permission;
- d) it has itself to render assistance.

5.3.2.4.2 Any station which has knowledge of distress traffic, and which cannot itself assist the station in distress, shall nevertheless continue listening to such traffic until it is evident that assistance is being provided.

5.3.2.5 TERMINATION OF DISTRESS COMMUNICATIONS AND OF SILENCE

5.3.2.5.1 When an aircraft is no longer in distress, it shall transmit a message cancelling the distress condition.

5.3.2.5.2 When the station which has controlled the distress communication traffic becomes aware that the distress condition is ended, it shall take immediate action to ensure that this information is made available, as soon as possible, to:

- 1) the ATS unit concerned;
- 2) the aircraft operating agency concerned, or its representative, in accordance with pre-established arrangements.

5.3.2.5.3 The distress communication and silence conditions shall be terminated by transmitting a message, including the words "DISTRESS TRAFFIC ENDED", on the frequency or frequencies being used for the distress traffic. This message shall be originated only by the station controlling the communications when, after the reception of the message prescribed in 5.3.2.5.1, it is authorized to do so by the appropriate Authority.

5.3.3 Radiotelephony urgency communications

5.3.3.1 ACTION BY THE AIRCRAFT REPORTING AN URGENCY CONDITION EXCEPT AS INDICATED IN 5.3.3.4

5.3.3.1.1 In addition to being preceded by the radiotelephony urgency signal PAN PAN (*see* 5.3.1.2), preferably spoken three times and each word of the group pronounced as the French word "panne", the urgency message to be sent by an aircraft reporting an urgency condition shall:

- a) be on the air-ground frequency in use at the time;
- b) consist of as many as required of the following elements spoken distinctly and, if possible, in the following order:
 - 1) the name of the station addressed;
 - 2) the identification of the aircraft;
 - 3) the nature of the urgency condition;
 - 4) the intention of the person in command;
 - 5) present position, level (i.e. flight level, altitude, etc., as appropriate) and heading;
 - 6) any other useful information.

Note 1.— The foregoing provisions of 5.3.3.1.1 are not intended to prevent an aircraft broadcasting an urgency message, if time and circumstances make this course preferable.

Note 2.— The station addressed will normally be that station communicating with the aircraft or in whose area of responsibility the aircraft is operating.

5.3.3.2 ACTION BY THE STATION ADDRESSED OR FIRST STATION ACKNOWLEDGING THE URGENCY MESSAGE

5.3.3.2.1 The station addressed by an aircraft reporting an urgency condition, or first station acknowledging the urgency message, shall:

- a) acknowledge the urgency message;
- b) take immediate action to ensure that all necessary information is made available, as soon as possible, to:
 - 1) the ATS unit concerned;
 - 2) the aircraft operating agency concerned, or its representative, in accordance with pre-established arrangements;

Note.— The requirement to inform the aircraft operating agency concerned does not have priority over any other action which involves the safety of the flight in distress, or of any other flight in the area, or which might affect the progress of expected flights in the area.

- c) if necessary, exercise control of communications.

5.3.3.3 ACTION BY ALL OTHER STATIONS

5.3.3.3.1 The urgency communications have priority over all other communications, except distress, and all stations shall take care not to interfere with the transmission of urgency traffic.

5.3.3.4 ACTION BY AN AIRCRAFT USED FOR MEDICAL TRANSPORTS

5.3.3.4.1 The use of the signal described in 5.3.3.4.2 shall indicate that the message which follows concerns a protected medical transport pursuant to the 1949 Geneva Conventions and Additional Protocols.

5.3.3.4.2 For the purpose of announcing and identifying aircraft used for medical transports, a transmission of the radiotelephony urgency signal PAN PAN, preferably spoken three times, and each word of the group pronounced as the French word “panne”, shall be followed by the radiotelephony signal for medical transports MAY-DEE-CAL, pronounced as in the French “médical”. The use of the signals described above indicates that the message which follows concerns a protected medical transport. The message shall convey the following data:

- a) the call sign or other recognized means of identification of the medical transports;
- b) position of the medical transports;
- c) number and type of medical transports;
- d) intended route;
- e) estimated time en route and of departure and arrival, as appropriate; and
- f) any other information such as flight altitude, radio frequencies guarded, languages used, and secondary surveillance radar modes and codes.

5.3.3.5 ACTION BY THE STATION ADDRESSED OR BY OTHER STATIONS RECEIVING A MEDICAL TRANSPORTS MESSAGE

5.3.3.5.1 The provisions of 5.3.3.2 and 5.3.3.3 shall apply as appropriate to stations receiving a medical transports message.