



Annex 10
Volume II
Sixth Edition
Corrigendum
(English/French/
Russian/Spanish)
2/6/08

**INTERNATIONAL STANDARDS,
RECOMMENDED PRACTICES AND
PROCEDURES FOR AIR NAVIGATION SERVICES**

**AERONAUTICAL
TELECOMMUNICATIONS**

**ANNEX 10
TO THE CONVENTION ON INTERNATIONAL CIVIL AVIATION**

**VOLUME II
COMMUNICATION PROCEDURES
including those with PANS status**

SIXTH EDITION — JULY 2001

CORRIGENDUM

1. Please replace existing page 5-12, dated 24/11/05, by the attached new page bearing the notation “Corr.” and dated 2/6/08.
 2. Record the entry of this corrigendum on page (ii).
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118.010	ONE ONE EIGHT DECIMAL ZERO ONE ZERO
118.025	ONE ONE EIGHT DECIMAL ZERO TWO FIVE
118.050	ONE ONE EIGHT DECIMAL ZERO FIVE ZERO
118.100	ONE ONE EIGHT DECIMAL ONE

Note 2.— Caution must be exercised with respect to the indication of transmitting channels in VHF radiotelephony communications when all six digits of the numerical designator are used in airspace where communication channels are separated by 25 kHz, because on aircraft installations with a channel separation capability of 25 kHz or more, it is only possible to select the first five digits of the numerical designator on the radio management panel.

Note 3.— The numerical designator corresponds to the channel identification in Annex 10, Volume V, Table 4-1 (bis).

5.2.1.7.3.4.4 PANS.— In airspace where all VHF voice communications channels are separated by 25 kHz or more and the use of six digits as in 5.2.1.7.3.4.3 is not substantiated by the operational requirement determined by the appropriate authorities, the first five digits of the numerical designator should be used, except in the case of both the fifth and sixth digits being zeros, in which case only the first four digits should be used.

Note 1.— The following examples illustrate the application of the procedure in 5.2.1.7.3.4.4 and the associated settings of the aircraft radio management panel for communication equipment with channel separation capabilities of 25 kHz and 8.33/25 kHz:

Channel	Transmitted as	Radio management panel setting for communication equipment with	
		25 kHz (5 digits)	8.33/ 25 kHz (6 digits)
118.000	ONE ONE EIGHT DECIMAL ZERO	118.00	118.000
118.025	ONE ONE EIGHT DECIMAL ZERO TWO	118.02	118.025
118.050	ONE ONE EIGHT DECIMAL ZERO FIVE	118.05	118.050
118.075	ONE ONE EIGHT DECIMAL ZERO SEVEN	118.07	118.075
118.100	ONE ONE EIGHT DECIMAL ONE	118.10	118.100

Note 2.— Caution must be exercised with respect to the indication of transmitting channels in VHF radiotelephony communications when five digits of the numerical designator

are used in airspace where aircraft are also operated with channel separation capabilities of 8.33/25 kHz. On aircraft installations with a channel separation capability of 8.33 kHz and more, it is possible to select six digits on the radio management panel. It should therefore be ensured that the fifth and sixth digits are set to 25 kHz channels (see Note 1).

Note 3.—The numerical designator corresponds to the channel identification in Annex 10, Volume V, Table 4-1 (bis).

5.2.1.8 Test procedures

5.2.1.8.1 PANS.— The form of test transmissions should be as follows:

- the identification of the station being called;
- the aircraft identification;
- the words "RADIO CHECK";
- the frequency being used.

5.2.1.8.2 PANS.— The reply to a test transmission should be as follows:

- the identification of the aircraft;
- the identification of the aeronautical station replying;
- information regarding the readability of the aircraft transmission.

5.2.1.8.3 PANS.— The test transmission and reply thereto should be recorded at the aeronautical station.

5.2.1.8.4 PANS.— When the tests are made, the following readability scale should be used:

Readability Scale

- Unreadable
- Readable now and then
- Readable but with difficulty
- Readable
- Perfectly readable

5.2.1.9 Exchange of communications

5.2.1.9.1 Communications shall be concise and unambiguous, using standard phraseology whenever available.

5.2.1.9.1.1 Recommendation.— Abbreviated procedures should only be used after initial contact has been established and where no confusion is likely to arise.

5.2.1.9.2 *Acknowledgement of receipt.* The receiving operator shall make certain that the message has been received correctly before acknowledging receipt.

Note.— Acknowledgement of receipt is not to be confused with acknowledgement of intercept in radiotelephony network operations.

5.2.1.9.2.1 When transmitted by an aircraft station, the acknowledgement of receipt of a message shall comprise the call sign of that aircraft.

5.2.1.9.2.2 **PANS.**— An aircraft station should acknowledge receipt of important air traffic control messages or parts thereof by reading them back and terminating the readback by its radio call sign.

Note 1.— Air traffic control clearances, instructions and information requiring readback are specified in PANS-ATM (Doc 4444).

Note 2.— The following example illustrates the application of this procedure:

(ATC clearance by network station to an aircraft)

Station:

TWA NINE SIX THREE MADRID

Aircraft:

MADRID TWA NINE SIX THREE

Station:

TWA NINE SIX THREE MADRID — ATC CLEARS
TWA NINE SIX THREE TO DESCEND TO NINE
THOUSAND FEET

Aircraft (acknowledging):

CLEARED TO DESCEND TO NINE THOUSAND
FEET — TWA NINE SIX THREE

Station (denoting accuracy of readback):

MADRID

5.2.1.9.2.3 When acknowledgement of receipt is transmitted by an aeronautical station:

- 1) *to an aircraft station:* it shall comprise the call sign of the aircraft, followed if considered necessary by the call sign of the aeronautical station;
- 2) *to another aeronautical station:* it shall comprise the call sign of the aeronautical station that is acknowledging receipt.

5.2.1.9.2.3.1 **PANS.**— An aeronautical station should acknowledge position reports and other flight progress reports by reading back the report and terminating the readback by its

call sign, except that the readback procedure may be suspended temporarily whenever it will alleviate congestion on the communication channel.

5.2.1.9.2.4 **PANS.**— It is permissible for verification for the receiving station to read back the message as an additional acknowledgement of receipt. In such instances, the station to which the information is read back should acknowledge the correctness of readback by transmitting its call sign.

5.2.1.9.2.5 **PANS.**— If both position report and other information — such as weather reports — are received in the same message, the information should be acknowledged with the words such as “WEATHER RECEIVED” after the position report has been read back, except when intercept of the information is required by other network stations. Other messages should be acknowledged, the aeronautical station transmitting its call sign only.

5.2.1.9.3 *End of conversation.* A radiotelephone conversation shall be terminated by the receiving station using its own call sign.

5.2.1.9.4 *Corrections and repetitions*

5.2.1.9.4.1 When an error has been made in transmission, the word “CORRECTION” shall be spoken, the last correct group or phrase repeated, and then the correct version transmitted.

5.2.1.9.4.2 If a correction can best be made by repeating the entire message, the operator shall use the phrase “CORRECTION, I SAY AGAIN” before transmitting the message a second time.

5.2.1.9.4.3 **Recommendation.**— When an operator transmitting a message considers that reception is likely to be difficult, he should transmit the important elements of the message twice.

5.2.1.9.4.4 If the receiving operator is in doubt as to the correctness of the message received, he shall request repetition either in full or in part.

5.2.1.9.4.5 If repetition of an entire message is required, the words “SAY AGAIN” shall be spoken. If repetition of a portion of a message is required, the operator shall state: “SAY AGAIN ALL BEFORE...(first word satisfactorily received)”; or “SAY AGAIN...(word before missing portion) TO...(word after missing portion)”; or “SAY AGAIN ALL AFTER...(last word satisfactorily received)”.

5.2.1.9.4.6 **Recommendation.**— Specific items should be requested, as appropriate, such as “SAY AGAIN ALTITUDE”, “SAY AGAIN WIND”.

5.2.1.9.4.7 If, in checking the correctness of a readback, an operator notices incorrect items, he shall transmit the words “NEGATIVE I SAY AGAIN” at the conclusion of the