



International Civil Aviation Organization

**Second Meeting of the Middle East Regional Aviation Safety Group
(RASG-MID/2)**

(Abu Dhabi, UAE, 12 - 14 November 2012)

Agenda Item 3: Regional Performance Framework for Safety

CALL-SIGN CONFUSION

(Presented by IATA)

SUMMARY

The use of similar call signs by aircraft operating in the same area often gives rise to potential and actual flight safety incidents. Reports have been raised by airline operators and Air Navigation Service Providers of common incidents related to call-sign conflict in the Middle East. This paper gives an overview of call-sign confusion related incidents and proposed course of action.

Action by the meeting is at paragraph 3.

1. INTRODUCTION

1.1 The use of similar call signs by aircraft operating in the same area, on the same radio frequency gives rise to potential and actual flight safety incidents.

1.2 Call sign confusion can be either aural or visual, or both. Aural confusion can occur between flight crews and controller – and sometimes between different flight crews. Visual confusion is primarily an ATC problem. It relates to flight progress strips (FPS) and radar displays, where call signs are the primary means of identifying the aircraft.

2. DISCUSSION

2.1 The following are some examples of the more common causes for call sign confusion:

- a) airlines allocate commercial flight numbers as call-signs; these are normally consecutive and therefore similar;
- b) airlines schedule flights with similar call signs to be in the same airspace at the same time;
- c) call signs coincidentally contain the same alphanumeric characters in a different order; and
- d) call signs contain repeated digits.

2.2 In general any of the following might be a consequence of call-sign confusion:

- a) Loss of communication
- b) Loss of separation
- c) Level bust
- d) Airprox
- e) Midair collision

2.3 To address this safety critical issue, used call signs should be reviewed to ensure that aircraft with similar call signs are not likely to be routinely in the same airspace at the same time, and there should be a process to systematically resolve ongoing issues arising from reports of similar call signs from flight crew, ANSPs or other operators.

2.4 Accordingly, it is suggested to task the Annual Safety Report Team (ASRT) to conduct a study of call-sign confusion to improve safety levels as part of the Safety Support Activities. The objectives are to collect reliable data over a specified period of time, to ascertain the magnitude of the problem, and confirm the categories of contributing factors causing call-sign confusion.

2.4.1 Within the study, airlines and controllers in the MID region will be requested to share all reports related to call-sign confusion over a specific period of time.

2.4.2 Each report will be assigned a severity grading, which will indicate if prescribed separation was lost during the incident and whether, or not, there was some deviation from operating procedures by the flight crew(s) or controller.

2.4.3 The results of the study will include analysis of the received reports and would also enable airlines, flight crew and controllers to focus attention on structure, format and use of call signs in order to reduce the incidence of confusion.

2.4.4 This study and analysis will not be with the intention to apportion blame or liability to any airline or controller involved in a call sign confusion occurrence. Involvement in occurrences submitted by any party is confidential and will not confer blame on any individual or organization. The sole purpose of this study is to enhance aviation safety by the prevention of call sign confusion occurrences.

2.5 Examples of guidelines that will result from the analysis of call-sign confusion occurrences are:

- a) avoid multiple use of the same digit;
- b) consider a balance of alphanumeric and numeric call signs;
- c) ensure there is a tactical response system to review and amend call signs where necessary; and
- d) when useful capacity in the allocation of flight number and/or alphanumeric call signs has been reached, consider applying for and using a second company call sign designator.

2.5.1 Guidelines to pilots might include:

- a) positively confirm instructions with ATC if any doubt exists between flight crew Members;
- b) confirm unexpected instructions for any particular stage of flight;
- c) advise ATC if it is suspected that another aircraft has misinterpreted an instruction, ATC may be unaware of this fact; and
- d) at critical stages of flight actively monitor ATC instructions and compliance with them.

2.5.2 Guidelines to controllers might include:

- a) advise adjacent sectors/airports if it is felt that potential confusion may exist between aircraft likely to enter their airspace;
- b) the similarity of some aircraft call signs on the same frequency can cause confusion which may lead to an incident. Controllers are to warn pilots concerned and, if necessary, instruct one or both aircraft to use alternative call signs while they are on the frequency; and
- c) ensure clearances are read back correctly.

3. ACTION BY THE MEETING

3.1 The meeting is invited to:

- a) review the contents of this paper; and
- b) endorse the proposal to take up call-sign confusion analysis under the Annual Safety Report Team.