



First Meeting of the Call Sign Confusion Ad-hoc Working Group (CSC WG/1)

Introduction

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Outline

- Background
- ICAO Provisions related to CSC
- Questionnaire Results
- Action by the meeting



Second Meeting of the Middle East Regional Aviation Safety Group (Abu Dhabi, UAE, 12 – 14 November 2012)

The meeting noted that 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.**



The meeting agreed to task the MID-ASRT to conduct a study of call-sign confusion to improve safety levels as part of the safety support activities.

The meeting noted with appreciation that UAE has established a National Working Group (WG) to address the safety issues associated with call sign confusion and is willing to share the outcome of this WG with the MID-ASRT and MID-SST for the benefit of safety in the Region.

The meeting further noted that necessary coordination with MIDANPIRG might be needed for the implementation of some mitigation measures related to call sign confusion.



Third Meeting of the Middle East Regional Aviation Safety Group (*Kuwait, 27-29 January 2014*)

The meeting was apprised of the results of the study on call sign confusion and endorsed the Second Edition of the MID Annual Safety Report (ASR), which includes the analysis and results of the study.



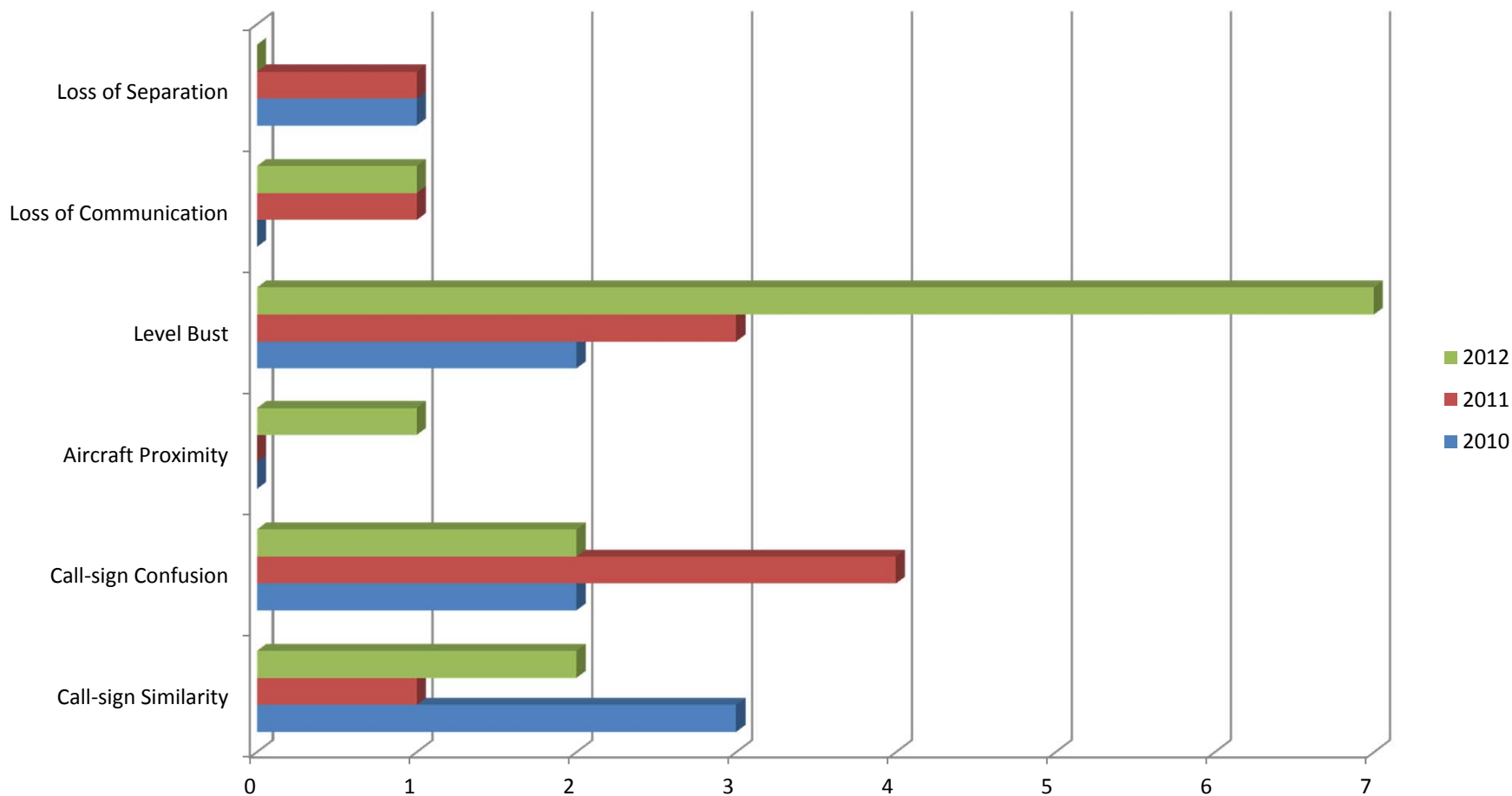
MID Region Annual Safety Report Second Edition, January 2014

Pursuant to the RASG-MID/2 Meeting, a study was launched to collect reliable data over a specified period of time, to ascertain the magnitude of the safety risk resulting from call-sign confusion, and confirm the categories of contributing factors in the MID Region.

The call-sign confusion survey was distributed to all 29 IATA members and all 15 States in the MID Region. Responses from 9 airlines were received. Four airlines reported that they have no incidents to report, and one reported no occurrences in the MID Region.

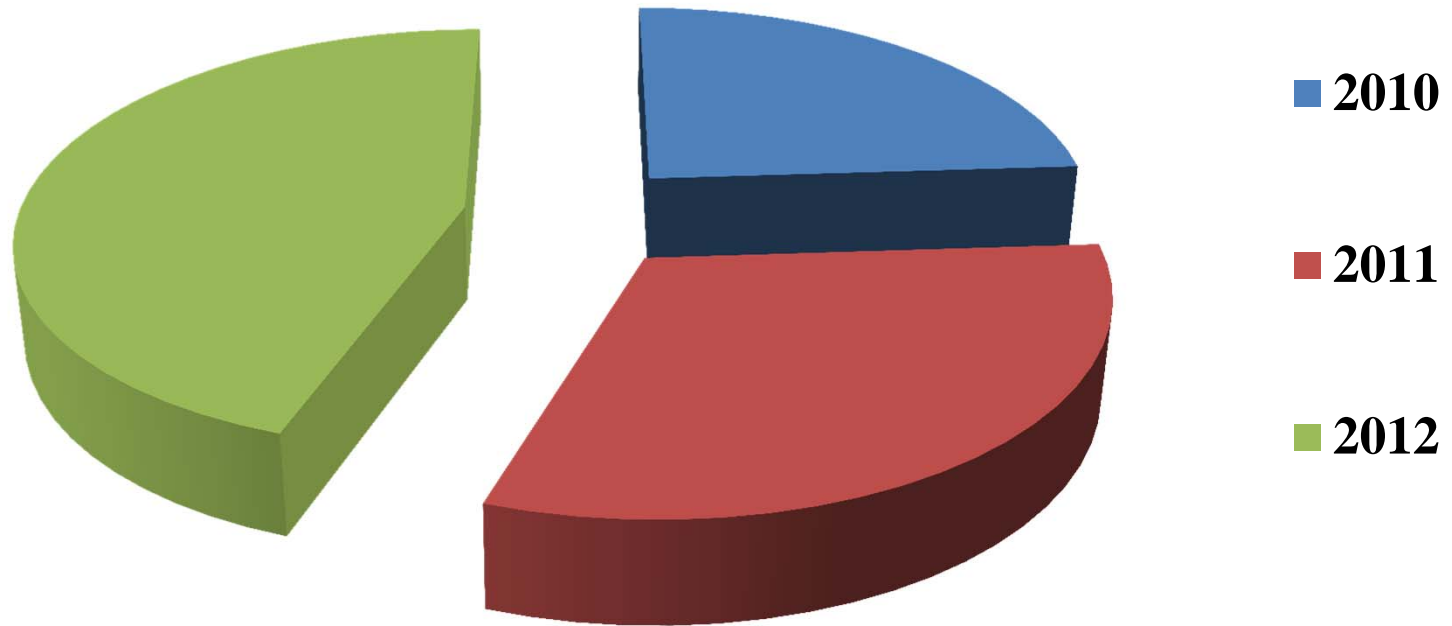


Nature of Occurrence



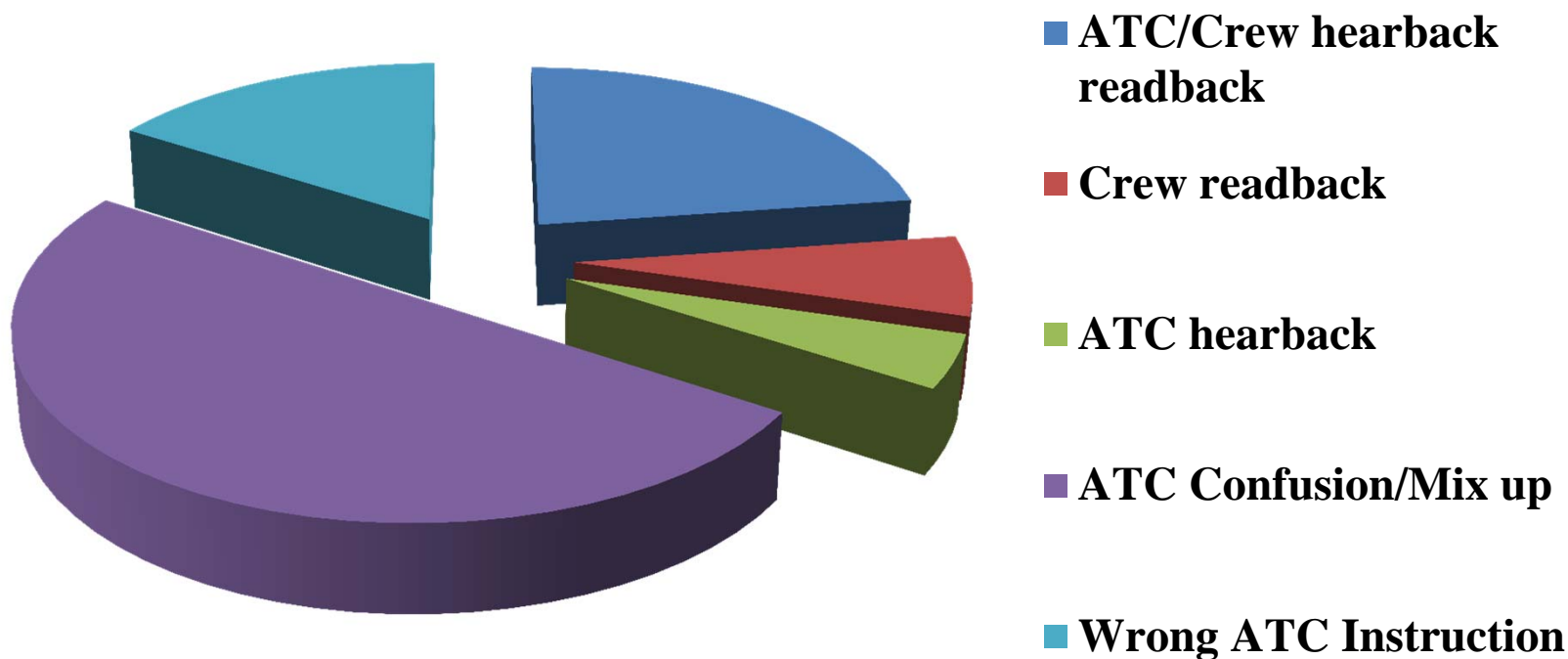


Frequency of Occurrence





Main Root Cause





Fourth Meeting of the MIDANPIRG Steering Group (Cairo, Egypt, 24-26 November 2014)

The meeting reviewed the outcome of the ATM SG/1 meeting (Cairo, 9-12 June 2014) and the CNS SG/6 meeting (Tehran, Iran, 9-11 September 2014).

The meeting recalled that the ICAO PANS-ATM Doc 4444 stipulates that aircraft identification in Item 7 of the FPL should not exceed 7 alphanumeric characters, without hyphens or symbols.

The meeting recalled that call sign confusion and similarity has been identified as a safety issue by the RADG-MID/2 meeting



It was highlighted that, in order to reduce the level of operational call sign confusion events, and therefore improve levels of safety, several Airlines moved from the concept of using a numeric (commercial) call-sign (e.g. UAE503) to the use of an 'alpha-numeric' call-sign (e.g. UAE59CG). This is now common practice in the European Region.

The meeting noted that UAE has worked on various activities to address the call sign confusion issue, in particular the implementation of software designed to automatically assign alternative call sign to track label in case of identification of call sign similarity. The meeting appreciated UAE offer to share the experience on their solution with other States.



The meeting recognized that many mitigation measures could be investigated to eliminate the risks associated with the call sign confusions. Accordingly, the meeting agreed to the following Draft Conclusion:

MSG CONCLUSION 4/22: CALL SIGN CONFUSION

That,

- a) a survey based on the questionnaire at Appendix 5A related to the acceptance/processing of flight plans containing “alphanumeric” call signs ending with letter(s) be conducted;*
- b) States that have not yet done so be invited to take necessary measures to comply with ICAO Annex 10 and Doc 4444 provisions related to the acceptance of the alphanumeric call signs; and*
- c) States be invited to inform the ICAO MID Regional Office of the preferred option for the mitigation of the risks associated with the call sign confusion before 31 January 2015.*



The meeting recognized the urgency of implementing mitigation measures for the call sign confusion and similarity. Accordingly, the meeting agreed to establish a Call Sign Confusion ad-hoc Working Group (CSC WG) and agreed to the following MSG Decision

MSG DECISION 4/23: CALL SIGN CONFUSION AD-HOC WORKING GROUP

That, a Call Sign Confusion ad-hoc Working Group be established in order to:

- a) analyze the results of the survey on the acceptance/processing of flight plans containing “alphanumeric” call signs ending with letter(s); and***
- b) develop solutions to mitigate the risk associated with call sign confusion and similarity.***



**THE THIRD MEETING OF THE RASG-MID STEERING COMMITTEE
(RSC/3)
(Cairo, Egypt, 9 – 11 December 2014)**

The meeting was apprised of the outcome of the MSG/4 meeting related to call sign confusion and similarity.

The meeting agreed that the follow-up on call sign confusion and similarity be based on the outcome of the Call Sign Confusion ad-hoc Working Group (CSC WG) established within the framework of MIDANPIRG.



PANS-ATM, Doc 4444, Appendix 2-Flight Plan

Definition of Alphanumeric characters (alphanumerics):

A collective term for letters and figures (digits).

Flight Plan ITEM 7:

AIRCRAFT IDENTIFICATION (MAXIMUM 7 CHARACTERS):

***INSERT* one of the following aircraft identifications, not exceeding 7 alphanumeric characters and without hyphens or symbols:**



- a) **the ICAO designator for the aircraft operating agency followed by the flight identification (e.g. KLM511, NGA213, JTR25) when in radiotelephony the call sign to be used by the aircraft will consist of the ICAO telephony designator for the operating agency followed by the flight identification (e.g. KLM511, NIGERIA 213, JESTER 25); *OR***

- b) **the nationality or common mark and registration mark of the aircraft (e.g. EIAKO, 4XBCD, N2567GA), when:**
 - 1) **in radiotelephony the call sign to be used by the aircraft will consist of this identification alone (e.g. CGAJS), or preceded by the ICAO telephony designator for the aircraft operating agency (e.g. BLIZZARD CGAJS);**

 - 2) **the aircraft is not equipped with radio.**



Annex 10 Volume II Chapter 5 ***Radiotelephony call signs for aircraft***

Full call signs

An aircraft radiotelephony call sign shall be one of the following types:

***Type a)* the characters corresponding to the registration marking of the aircraft; or**

***Type b)* the telephony designator of the aircraft operating agency, followed by the last four characters of the registration marking of the aircraft;**

***Type c)* the telephony designator of the aircraft operating agency, followed by the flight identification.**



Note 1.— The name of the aircraft manufacturer or of the aircraft model may be used as a radiotelephony prefix to the Type a) call sign (see Table 5-1).

Note 2.— The telephony designators referred to in Types b) and

- c) are contained in Doc 8585 — Designators for Aircraft Operating Agencies, Aeronautical Authorities and Services.*

Note 3.— Any of the foregoing call signs may be inserted in field 7 of the ICAO flight plan as the aircraft identification.

- Instructions on the completion of the flight plan form are contained in PANS-ATM, Doc 4444*



Abbreviated call signs

The aircraft radiotelephony call signs, with the exception of Type c), may be abbreviated in the circumstances prescribed in

Abbreviated call signs shall be in the following form:

Type a) the first character of the registration and at least the last two characters of the call sign;

Type b) the telephony designator of the aircraft operating agency, followed by at least the last two characters of the call sign;

Type c) no abbreviated form.

Note.— Either the name of the aircraft manufacturer or of the aircraft model may be used in place of the first character in Type a).



ICAO Provisions (cont'd)

	Type a)			Type b)	Type c)
Full call sign	N 57826	*CESSNA FABCD	*CITATIO N FABCD	VARIG PVMA	SCANDINA VIAN 937
Abbreviated call sign	N26 or N826	CESSNA CD or CESSNA BCD	CITATION CD or CITATION BCD	VARIG MA or VARIG VMA	(no abbreviated form)

An aircraft shall not change the type of its radiotelephony call sign during flight, except temporarily on the instruction of an air traffic control unit in the interests of safety.

Full radiotelephony call signs shall always be used when establishing communication.



States' Questionnaire on Call Signs Confusion

Circulated through State Letter Ref.: AN 6/34-14/332 dated 18 December 2014

- 1. In accordance with ICAO provisions, does your State Regulations allow the use of alphanumeric call sign ending with a LETTER(s) for civil aircraft e.g. ABC123A, ETD012B, UAE231C, ABC12DE**
- 2. Does your ATM system accept the following call sign format in the FPL:**
 - alphanumeric: e.g. ETD020**
 - alphanumeric ending with a LETTER(s): e.g. ETD020A, ETD21BC**
- 3. Is the use of alphanumeric call sign ending with a LETTER(s) already implemented?**



- 4. Do you have any restriction (technical, regulatory, procedure, etc.) on the use of alpha numeric call sign ending with a LETTER(s) ?**
- 5. Please advise what are your preferred options, plans and/or implemented measures to mitigate the risk associated with call sign confusion and similarity?**
- 6. Is your ATM system capable to manage the call sign similarity?**
- 7. Additional comments, if any.**



States' Questionnaire on Call Signs Confusion

Replies

- Bahrain
- Egypt
- Iraq
- Qatar
- Syria



Summary of the Replies

Questions	1	2	3	4	5	6	7
Replies	4 Yes	5 Yes	5 Yes	4 Yes	On going	2 Yes	3 No
	1 No				Manually	3 No	2 Support the CSC WG



The meeting is invited to:

- a) Take into consideration the information contained in this presentation when discussing solutions to mitigate the risk associated with call sign confusion and similarity; and**
- b) Analyze the States' replies to the Questionnaire on call sign confusion**



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THANK YOU