Status Quo and Initiatives: Alpha-numeric Call-Signs in the ICAO MID Region - ...and *elsewhere*...
Today’s Agenda

ATC Call Sign-Similarity and –Confusion:

● Status Quo: ICAO MID Region
● Emirates: Review and Initiatives
● EK Global Survey
● Supporters & Stakeholders
● The way forward: Global Initiatives
● The Challenges
● Outlook
Status of the ICAO MID Region

The ICAO Middle East Region as an entire region is not yet ready for the full acceptance of alpha-numeric ATC Call-Signs…

…BUT major work/initiatives are ongoing!
EK-Initiatives to move to using alpha-numeric call-signs

- Active Involvement in the U.A.E. National Airspace Advisory Committee/ NASAC Working Group 7;
- Conduction of an “Alternate Call-Sign Trial” with Dubai TWR/Approach, where tactical call-sign changes could be initiated by both, ATC as well as the Flight Crew;
- Creation of awareness at the EK Commercial Planning department to coordinate the intended new/upcoming call signs beforehand;
- Development of an EK internal Call-Sign Conflict Overview tool;
- Storage of any similar call-sign where EK flights are involved from any ANSP unit globally.
- Liaison with our Flight Planning System provider to discuss the system handling of ‘ATC Call-Signs’ (in parallel to the commercial call-signs);
- Liaison with other EK System Service Providers to discuss handling of alpha-numeric call-signs (FMS, ACARS, Ops System, Interfaces, etc. etc.);
- Dialogue started with other Airlines that make use of “ATC Call Signs”;
- Identifying challenges/problems of using separated ATC Call-Signs within EK (departments, systems, tools);
- Identifying challenges/problems of using separated ATC Call-Signs with ATC, Overflight Permissions, Landing Permissions, Airport Systems;
- Collecting documentation/literature in regards to call-sign confusion (examples, trials, practices, human factor issues etc.);
- Collecting data/information from other Airlines;
- Collecting data/information from ATC units;
- What prevents us from doing this immediately are problems in many ICAO Regions and individual stakeholders (beside of ATC) to accept alpha-numeric call-signs e.g. for overflight approvals, landing approvals, airport slots and in the Airport environment itself (e.g. commercial flight number information on airport board displays);
- EK has initiated a survey and has distributed this to several internationally operating Airlines (- this survey will be shared at a later stage with you); it is of concern that foreign Airlines pointed out, that they were not able to apply for alpha-numeric call-signs e.g. in the U.A.E.;
- EK will move to alpha-numeric call-signs as soonest as possible, but only when it is assured, that all stakeholders involved in the particular flights fully accept the filing/use of ATC alpha-numeric call-signs;
- EK raises a Working Paper today (06MAY14) at the IATA MENA RCG to request compliance of all stakeholders in the Middle East Region to comply/accept with alpha numeric ATC call-signs;
- EK requests the set-up of a checklist, where all stakeholders (in the U.A.E.) have to confirm compliance/acceptance with the use of alpha-numeric ATC call-signs;
Airline Survey

Aircraft Call-Sign Confusion

and

Use of alpha-numeric Call-Signs

(urvey Period: April 2014)

The survey received responses from 52 worldwide operating Airlines.
32 worldwide operating Airlines participated in the EK Survey

- Green circles: Airlines that make use of alpha-numeric call-signs (home base)
- Red circles: Airlines that make NOT use of alpha-numeric call-signs (home base)
Number of Airlines using alpha-numeric ATC call-signs

- **YES**: 20 Airlines (62%)
- **NO**: 12 Airlines (38%)
The ICAO MID Region: Acceptance of alpha-numeric Call-Sign

The following table indicates either the entire region or individual countries, where Airlines specifically pointed out to not use alpha-numeric call-signs (- number of voting in brackets).

- 5 Airlines pointed out, that they do not/cannot use alpha-numeric call-signs in the ICAO MID Region.
- Specifically, the following countries were listed to be of a ‘challenge’:
  - Afghanistan
  - Egypt
  - Iraq
  - U.A.E.

Landing/Overflight Permissions: Have you experienced problems requesting/accepting overflight permissions when making use of ‘alpha-numeric’ ATC call-signs?
Why Airlines do not use alpha-numeric ATC call-signs:

- Problems Overflight Permissions: 22%
- Problems Landing Permissions: 26%
- System Problems: 13%
- No Call-Sign Conflicts: 13%
- High financial investment: 4%
- ATC not accepting: 5%
- FPL System not ready: 13%
- Other: 4%

ICAO MID - Call Sign Confusion Ad-hoc Working Group (CSC WG/1)
Abu Dhabi, February 16-18, 2015
Post-Implementation Analysis

What were the biggest problems you faced?

- No problems: 50%
- Change of culture: 29%
- Crews: Challenge with commercial/ATC call sign: 7%
- Changes only possible for schedule change: 7%
- Overflight & Landing Permit Acceptance: 7%
Supporters & Stakeholders

U.A.E. GCAA

IATA
(Regional Offices and Headquarter)

CANSO
– Middle East Office

ICAO
- Regional Offices

Dubai Air Navigation Services
- Trial Dubai TMA
U.A.E. GCAA has issued an AIC dealing with “Call Sign Similarity”
EK: Working Papers raised at CANSO & all IATA Regional Offices

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1. INTRODUCTION

1.1. Call Sign Confusion is a very significant safety risk within the ATM networks and requires addressing by all stakeholders. As aviation grows in volume and complexity of routes wise, harmonious and efficient ATC procedures need to work collaboratively to ensure that safety requirements and ATC procedures need to work collaboratively to ensure that safety requirements and ATC procedures need to work collaboratively to ensure that safety requirements and ATC procedures need to work collaboratively to ensure that safety requirements and ATC procedures need to work collaboratively to ensure that safety requirements and ATC procedures need to work collaboratively to ensure that safety requirements and ATC procedures need to work collaboratively to ensure that safety requirements and ATC procedures need to work collaboratively to ensure that safety requirements and ATC procedures need to work collaboratively to ensure that safety requirements and ATC procedures need to work collaboratively to ensure that safety requirements and ATC procedures need to work collaboratively to ensure that safety requirements and ATC 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AIRCRAFT CALL SIGN CONFUSION

(Presented by IAEA/CASRO)

SUMMARY
This working paper highlights the operational difficulties inherent as a factor in a result of use of similar call-signs by aircraft operators in the same sector and on the same radio frequency which would create a potential for flight safety incidents, and proposes solutions to alleviate the call-sign confusion.

Article by the meeting is subparagraph (a).

1. INTRODUCTION
1.1 The use of similar call-signs by aircraft operating in the same area and on the same radio frequency has potential to flight safety hazards, also known as “call-sign conflict” or “call-sign confusion.” The degree of such incidents arising and acting as a clearance conflict for similar aircraft due to call-sign confusion is a common occurrence.

2. DISCUSSION
2.1 As per ICAO, an aircraft call-sign consists of a group of alphanumeric characters used to identify an aircraft to air-ground communications.

2.2 The new amended ICAO DASA/TM Doc 4444 Appendix A which becomes applicable on 13 November 2014, contains alphanumeric characters and includes synonyms or symbols.

2.3 The provisions for the use of call-signs are contained in Annex 5, Volume II, and Chapter 5 and support the full call-signs contain the alphanumeric designation of the aircraft operating agency, followed by the flight identification.

2.4 Aircraft normally use some additional characters for flight identification on schedule flights and left the last characters for adding “D” as suffixed to identify the delayed flight.
5.22 Based on the above, the meeting requested the Secretariat to consolidate a final version of the ADCC/ICAO Bilateral Agreement Template to be appended to the Lene Template, which will be presented to the MSG4 meeting for endorsement.

5.23 The meeting encouraged States to provide the ICAO MID Regional Office with their update/progress reports on ADCC/ICAO implementation by 30 October 2014.

Call sign Confusion

5.24 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.

5.25 It was highlighted that, in order to reduce the level of operational call sign confusion events, and therefore improve levels of safety, several airline operators have changed their philosophy of only using a numeric (commercial) call sign (e.g. UBE300) to that of applying an “alphabetic” call sign (e.g. UAE55CD). This is now common practice in the European Region.

5.26 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 signs to track labels in case of identification of call sign similarity. The meeting appreciated UAE efforts to share the experience on their solutions with other States.

5.27 The meeting recognized that many mitigation measures could be investigated to eliminate the risks associated with the call sign confusion and agreed accordingly to the following Draft Conclusion:

DRAFT CONCLUSION 6.2 Call sign Confusion

That:

- a survey related to the acceptance processing of the alphanumeric call signs (as filed in the flight plans) be conducted;
- States that have not yet done so be invited to take necessary measures to comply with ICAO Doc 4444 provisions related to the acceptance of alphanumeric call signs (as filed in the flight plans), and
- 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.

GNSS Implementation in the MID Region

5.28 The meeting recalled that the recommendations concerning GNSS adopted by the AN
dConference were included in the Strategy for GNSS Implementation in the MID Region, which was endorsed by MIDANDRG12.

ICAO MID - Call Sign Confusion Ad-hoc Working Group (CSC WG/1)
Abu Dhabi, February 16-18, 2015
Subject: Call Sign Confusion

Action required: Reply not later than 31 January 2015

I have the honour to refer to the outcome of the Fourth meeting of the MIDSIGN/ENG Working Group (MSG-4) held in Cairo, Egypt 24-26 November 2014, in particular to the following:

MSG CONCLUSION 4.22: CALL SIGN CONFUSION

That:

a) it is necessary to amend the questionnaire at Appendix 5A (attached) relating to the acceptance/provision of flight plans containing “alphanumeric” call signs ending with letters be considered;

b) States that have not yet done so be invited to take necessary measures to comply with ICAO Annex 10 and Doc 4444 provisions relating to the acceptance of the alphanumeric call signs;

c) States be invited to inform the ICAO MID Regional Office of their preferred option for the mitigation of the risks associated with the call sign confusion before 31 January 2015.

Therefore, you are kindly requested to take necessary measures to ensure the implementation of the above MSG-4 Conclusions, complete the amended questionnaire and provide it to the ICAO MID Regional Office indicating your preferred option for the mitigation of the risks associated with the call sign confusion and completed before 31 January 2015.

Accept, for the assurance of my highest consideration.

Mohamed R. M. Kazmi
ICAO Regional Director, Cairo

Attachment
The Challenges

- Air Navigation Service Providers/ANSPs (ATC)
- Airports
- Overflight Permission Authorities
- Landing/Departure Slot Units
- Airline Systems
- “Mind Setting”
EK – The ‘Project Plan’

**Simulate**
- FPL Trials, System Checks, Flight Trials

**Plan**
- Surveys, Questionnaires, Overflight Permission Requests, Airport Slots

**Operations**
- Use of alpha-numeric call signs on a step-by-step basis for environments, where acceptance is fully confirmed.

**Post Review**
- Review operational results and problems and challenges. Statistics. Gradually increase the usage
Outlook
Our Vision for the future…

“Our vision for our future global ATM system is one where a pilot can fly into Dubai, Djakarta, Brussels, Lagos without any differences in equipment, procedures, or the quality of air traffic services.”

FAA Administrator Marion Blakey
Use of alpha-numeric ATC Call-Signs: We have a challenging plan for 2K15!
Thank you very much for your attention.

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