



Call sign Similarity “Call Sign Confusion”

MIDANPIRG ATM Sub Group
THIRD MEETING OF THE MIDANPIRG ATM SUB-GROUP
(ATM SG/3)
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ALPHA NUMERICAL CALL SIGN ACCEPTANCE TESTING

Callsign	Squawk	Dep Apt	Arr Apt	Alt Apt	Route	Annotations		
EAL210	3401	KALB	ALB_GDH2			22L	VIS	
Aircraft Type B752/F	110	KBOS	KPVD					
CID 498	1	210	fuel	/W/Have charts				
IFR/VFR	Temp Alt	Cruise Alt	Scratchpad	Remarks				

Safety

- Similar sounding call signs is a global, regional and national safety concern
- The good and important cooperation between EVAIR and IATA in the field of the ATM safety data collection and analysis have been in place for more than 5 years.

The main contributor to the 'Call Sign Confusion' was 'Hear back omitted'.

- Contributory factors most often cited in communication problems involving similar call signs were related to human factors:
- (a) controller accent (34%);
- (b) controller speech rate (28%);
- (c) pilot distraction (25%);
- (d) pilot expectation (22%);
- (e) pilot fatigue (20%).

- also common are frequency congestion (28%) and blocked transmissions (30%).
- Many airlines continue to use their IATA commercial flight numbers as call sign suffixes. However, because they tend to be allocated in batches of sequential and very similar numbers, call sign confusion occurs.
- Several airlines have switched to alphanumeric call signs reasonably successfully in recent years. However,

- if every operator adopts alphanumeric call signs, the limited choices available within the maximum of 4 elements allowed within a call sign suffix means that call sign confusion, similar to the existing numeric system, is likely to result.
- To be effective, such a strategy requires action on a regional and international basis. Call sign suffixes must be allocated according to a deliberate, coordinated policy that prevents a conflict arising in the first place.

Recommendations for air navigation service providers:

- Ensure that aircraft operators are made aware of any actual or potential call sign confusion reported by air traffic controllers.

Recommendations for air traffic controllers:

- Use correct RTF phraseology, procedures and discipline at all times.
- Do not clip transmissions.
- Ensure clearances are read back correctly. Do not use read-back time to execute other tasks.
- Monitor flight crew compliance with RTF call sign use.

- Take extra care when language difficulties may exist confusion may occur. If necessary, instruct one or both aircraft to use alternative call signs while they are on the frequency.
- Advise adjacent sectors/airports if it is felt that potential confusion may exist between aircraft likely to enter their airspace.
- Warn the pilots of aircraft on the same RTF frequency having similar call signs that call sign

Alpha Numeric within ATC call sign MID Region

- Utilizing alpha numeric within a ATC call sign can help reduce such confusion. ETD31A vs ETD311.
- Under the umbrella of MID Region ATM Enhancement Programme (MAEP) through the project manager Etihad Airways and IATA the use of alpha numerics within a ATC call sign testing began in 2014.
- The structured testing project required the close coordination with ICAO, ANSPs and airports for a regional collaborative approach.

Testing



- As alpha numeric call signs were never utilized within the Mid region as is done in Europe the project followed a structured approach:
 - Testing of state overflight permission request
 - Activating a “dummy flight” to test AFTN processing
 - Aircraft FMS and on board systems testing for compatibility
 - Flight crew briefings
 - Coordinate with ACC’s on actual Europe to middle east overflight

First Flight



- Etihad airways flew its first successful live flight from AUH to DUB on 22 February 2015 ETD42W
- Testing continues:
 - As overflights have tested successfully Etihad started coordination with international airports within the mid to assure that the ATC call sign did not impact the commercial call sign that is utilized by passengers, tickets and airport infrastructure.
 - To date 16 Etihad destinations in the Mid Region have been successfully tested. Most of the remaining Mid Region airports (non Etihad destinations) will be tested with the help of other Middle East Operators by the end of 2017.

Cross Regional

- In addition to the Middle East, Etihad Airways has introduced alpha numeric call signs to Europe, United States and India including Pakistan overflight approvals.
- Working with ICAO and monitoring cross regional implementation of alpha numeric call signs to assure regional requirements will harmonize.

WP-28 Recommendations

- WP-28 Appendix C provides project recommendations for the MID Region for regional implementation Q4 2017.



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