

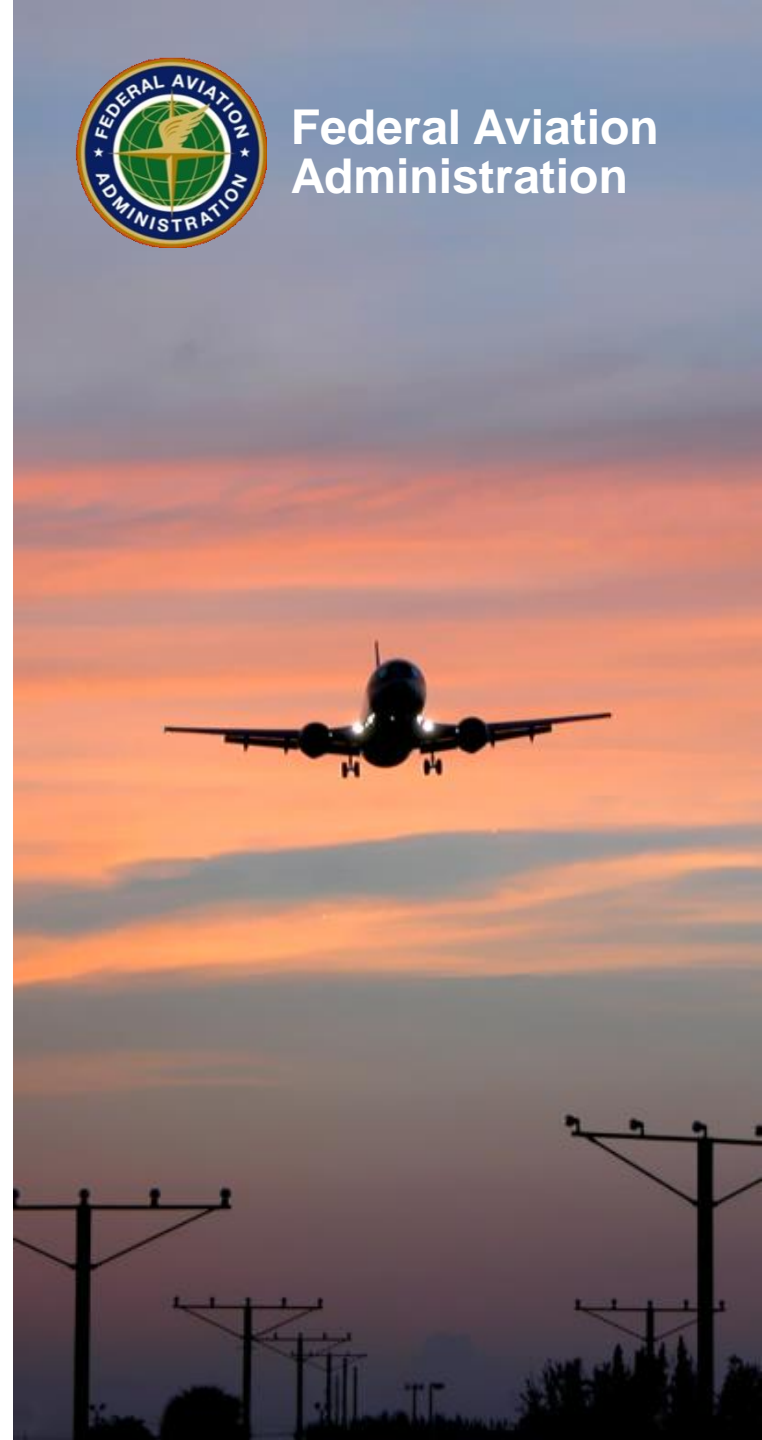


Federal Aviation
Administration

ADS-B Call Sign MisMatch (CSMM)

Briefing for Aircraft Operators

August 10, 2016



Background

- **ADS-B will be mandatory in specified airspace on January 1, 2020. (14 CFR 91.225)**
- **ADS-B will also provide significant benefits for aircraft operating in other than specified airspace.**
- **The FAA is taking a proactive role to assist operators to ensure that their ADS-B equipment is functioning properly.**
- **Complex new technologies frequently require close monitoring and additional personnel training to function as intended.**
- **This presentation will focus on operational issues. Avionics and installation issues will be addressed separately.**



Background (2)

- **The majority of the operational inconsistencies involve Call Sign MisMatch (CSMM).**
- **CSMM occurs anytime the aircraft identification listed in a flight plan does not exactly match the aircraft identification transmitted by the ADS-B transmitter.**
- **Whenever CSMM occurs, it causes significant operational difficulties for air traffic controllers.**

- **Pilots must be aware that when an aircraft is equipped with ADS-B, the ADS-B call sign must exactly match the flight plan call sign.**



U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION		(FAA USE ONLY) <input type="checkbox"/> PILOT BRIEFING <input type="checkbox"/> VNR <input type="checkbox"/> STOPOVER			TIME STARTED	SPECIALIST INITIALS
FLIGHT PLAN						
1. TYPE VFR IFR DVR	2. AIRCRAFT IDENTIFICATION	3. AIRCRAFT TYPE/ SPECIAL EQUIPMENT	4. TRUE AIRSPEED KTS	5. DEPARTURE POINT	6. DEPARTURE TIME PROPOSED (Z) ACTUAL (Z)	7. CRUISING ALTITUDE
8. ROUTE OF FLIGHT						
9. DESTINATION and city)		10. EST. TIME ENROUTE HOURS MINUTES		11. REMARKS		
12. FUEL ON BOARD HOURS MINUTES		13. ALTERNATE AIRPORT(S)		14. PILOT'S NAME, ADDRESS & TELEPHONE NUMBER & AIRCRAFT HOME BASE		15. NUMBER ABOARD
				17. DESTINATION CONTACT/TELEPHONE (OPTIONAL)		
16. COLOR OF AIRCRAFT		CIVIL AIRCRAFT PILOTS, FAR 91 requires you file an IFR flight plan to operate under instrument flight rules in controlled airspace. Failure to file could result in a civil penalty not to exceed \$1,000 for each violation (Section 901 of the Federal Aviation Act of 1958, as amended). Filing of a VFR flight plan is recommended as a good operating practice. See also Part 99 for requirements concerning DVR flight plans.				

FAA Form 7233-1 (8-82)

CLASS OF FLIGHT PLAN WITH _____ FSS ON ARRIVAL



30 Day Flight Analysis

- Recent data provided by ATC detailed 44,226 flights over a 30 day period where CSMM was identified.
- Typical CSMM examples:

Flight Plan Aircraft ID

ASA103
DAL80
MSQ421
LTD142
LN13LY
N27471
TN575JD

ADS-B Reported Aircraft ID

103
DAL080
N918PA
N807JA
N13LY
GUN471
N575JD

Potential Causes for CSMM

- **Certain ADS-B avionics equipment must be specifically configured during the installation process to permit the entry of call signs. If the ADS-B equipment is not properly configured, the aircraft's "N" number will be transmitted.**
- **If the equipment is properly configured, pilots must be trained to correctly enter the call sign or "N" number as applicable for the flight. Operators using call signs (DAL123) should consider using a checklist to verify that the call sign is properly input for each flight.**
- **If the equipment is not functioning properly, maintenance should be promptly advised.**

Flight Crew Briefing Suggestions

- **ADS-B must be turned on prior to taxi and should not be turned off until taxi is completed at the destination. This procedure allows ADS-B to be used for ground collision avoidance and ATC separation.**
- **Prior to taxi, pilots should ensure that the aircraft ID entered into the ADS-B transmitter matches exactly the aircraft ID on the flight plan.**
- **If the flight plan is filed using the aircraft registration number (N123RR for example), enter N123RR into the ADS-B transmitter. Do not enter any additional characters or spaces.**
- **If the flight plan is filed using the FAA-issued call sign (3 letters), enter the 3 letter call sign followed by the (one to four digit) flight number. Do not enter any additional characters or spaces.**

Flight Crew Briefing Suggestions

- **AIR TAXI FLIGHTS:** when it is your intention to use the prefix “tango”, Be certain to include “T” in block 2 of the flight plan immediately prior to the registration number (TN123WS). You must also set the ADS-B transmitter to transmit “TN123WS” prior to taxi.
- **AIR AMBULANCE FLIGHTS:** For medevac or lifeflight operations, the same procedure should be followed. Insert “L” in block 2 on the flight plan immediately prior to the registration number (LN777PW). You must also set the ADS-B transmitter to transmit “LN777PW” prior to taxi. However, if you plan to use a call sign (DOC123) the “L” prefix is not used and you should insert “Lifeflight” or “Medevac” in block 11 of the flight plan.

Reference Materials

- **Advisory Circular 90-114A, change 1, Automatic Dependent Surveillance-Broadcast Operations**
- **Aeronautical Information Manual**
- **14 CFR §91.225 Automatic Dependent Surveillance-Broadcast (ADS-B) Out equipment and use.**
- **14 CFR §91.227 Automatic Dependent Surveillance-Broadcast (ADS-B) Out equipment performance requirements.**
- **<http://www.faa.gov/nextgen/equipadsb/>**
- **AFS-430, Future Flight Technologies Branch**
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