Federal Aviation Administration

Memorandum

Date: AUG - 3 2017

To: Jere Hayslett, (A) Director, Air Traffic Services, AJM-2

From: Lorelei Peter, Assistant Chief Counsel for Regulations, AGC-200

Prepared by: Sabrina Jawed, Attorney, AGC-240

Subject: Legal Interpretation of Flight ID Language in 14 CFR 91.227(d)(8)

This responds to your request for a legal interpretation dated July 27, 2017. In your request, you ask for clarification of 14 C.F.R. 91.227(d)(8).

Section 91.227(d)(8) requires, in pertinent part, that each aircraft broadcast "[a]n indication of the aircraft's call sign that is submitted on the flight plan, or the aircraft's registration number, except when the pilot has not filed a flight plan, has not requested ATC services, and is using a TSO-C154c self-assigned temporary 24-bit address." You state that some operators have improperly interpreted this language to allow them to file a flight plan with an aircraft's call sign, while broadcasting the aircraft's registration number. For example, some operators are listing an aircraft call sign on their filed flight plan that is not the aircraft's N-number, and then transmitting the N-number as their Flight ID. In these instances, the call sign in the flight plan and the transmitted aircraft registration number do not match. When this occurs, Air Traffic Control receives an alert.

In 2007, the FAA proposed performance requirements to facilitate the use of Automatic Dependent Surveillance-Broadcast (ADS-B) to accommodate the expected increase in demand for air transportation. As part of these requirements, the FAA proposed requiring continual broadcast of an aircraft's call sign submitted on the flight plan, or the aircraft's registration number. The preamble to the proposed rule indicates that an aircraft would be required to broadcast the call sign or registration number listed on the corresponding flight plan so that ATC is able to connect the flight plan with the aircraft on the radar display. The FAA stated that "[t]his message element would correlate flight plan information with the data that ATC views on the radar display and facilitate ATC communication with the aircraft. The aircraft's call sign or registration number broadcast in the ADS-B message would have to be identical to information contained in its flight plan." *ADS-B Out Performance Requirements to Support ATC Service*, NPRM, 72 FR 56947, 56954 (Oct. 5, 2007).

The final rule was published in 2010, and reiterates the position articulated in the proposed rule. The FAA stated the requirement in § 91.227(d)(8) "correlates flight plan information with the data that ATC views on the radar display, and facilitates ATC communication with the aircraft." *ADS-B Out Performance Requirements to Support ATC Service*, Final Rule, 75 FR 30160, 30173 (May 28, 2010).

It is clear from the NPRM and final rule preambles that § 91.227(d)(8) is meant to ensure that ATC is able to correlate flight plan information with information presented on the radar display. Therefore, to satisfy § 91.227(d)(8), a pilot would have to provide the same call sign on his or her flight plan as he or she transmits out using ADS-B. If a pilot filed a flight plan with the aircraft's call sign, but transmitted out the aircraft's registration number that differed from the call sign, ATC and nearby aircraft with ADS-B-In systems would see different information, which could cause confusion. This was not the intent of the rule, as clearly expressed by the preamble, and the pilot would be in violation of § 91.227(d)(8).

I hope this information has been helpful. If you have further questions concerning this response, please contact Sabrina Jawed on my staff at 202-267-8839.

Federal Aviation Administration

Memorandum

Date:

To: Lorelei Peter, Assistant Chief Counsel for Regulations, AGC-200

From: Jere K. Hayslett, (A) Director, AJM-2 7/27/17

Prepared by: Doug Arbuckle, Technical Advisor, AJM-2

Subject: Request for Legal Interpretation, Title 14 CFR 91.227(d)(8)

Currently 14 CFR 91.227 (d) (8) states:

> (8) An indication of the aircraft's call sign that is submitted on the flight plan, or the aircraft's registration number, except when the pilot has not filed a flight plan, has not requested ATC services, and is using a TSO-C154c self-assigned temporary 24-bit address;

The issue with this language is that some manufacturers and operators have interpreted this language to mean that the aircraft registration number can be programmed into the Flight ID field of the ADS-B avionics and yet a different aircraft call sign can be filed in the flight plan. This will cause an indication of "call sign mismatch" to FAA Air Traffic Controllers.

The intended behavior is for the ADS-B Flight ID information to match the aircraft call sign as filed in the flight plan. This is to insure that aircraft identification information seen by aircraft ADS-B-In systems match the information seen by air traffic controllers. FAA air traffic automation platforms have implemented a "call sign mismatch" check to mitigate the risk of mis-identifying aircraft when the ADS-B Flight ID doesn't match the aircraft call sign as filed in the flight plan.

The Air Traffic Organization requests that AGC provide a legal interpretation regarding the meaning of the language in Title 14 CFR 91.227(d)(8). Consideration was given to requesting a technical amendment to this Title 14 provision, but after discussions with AGC, it was mutually determined that a legal interpretation is the desired course of action.

If you have any questions, please contact Robert Nichols, Surveillance Services Group Manager, Air Traffic Systems, Program Management Organization, ATO, at robert.nichols@faa.gov or 202-267-0629.