

*Federal Protective Service
National Protection & Programs Directorate*
U.S. Department of Homeland Security
800 North Capitol Street, NW
Suite 300
Washington, DC 20536



**Homeland
Security**

May 5, 2017

Mr. Michael Huerta
Administrator
Federal Aviation Administration
800 Independence Avenue, SW
Washington, DC 20591

Re: Request for Rulemaking on Marking of Small Unmanned Aircraft

Dear Mr. Huerta:

This letter is written on behalf of the Department of Homeland Security (DHS), National Protection and Programs Directorate, Federal Protective Service (FPS) to request that the Federal Aviation Administration (FAA) initiate rulemaking to amend 14 C.F.R. Part 48 for the purpose of changing permissible marking methods for small unmanned aircraft. DHS FPS specifically requests that FAA remove the ability for an owner of a small unmanned aircraft to mark the registration number of the aircraft on the inside of a closed compartment that is easily accessible. Currently, 14 C.F.R. 48.205(c) states: "The unique identifier must be readily accessible and visible upon inspection of the small unmanned aircraft. A unique identifier enclosed in a compartment is readily accessible if it can be accessed without the use of any tool." DHS FPS asks that this provision be changed to no longer permit enclosure in a compartment where the number is not visible without manipulation of the aircraft.

In the intervening time since the Part 48 interim final rule (IFR) was published, unmanned aircraft system (UAS) technology has rapidly advanced. With increasing availability, ease of operation, and decreasing cost, these aircraft can be a source of risk; a potential threat; and time consuming for the law enforcement officer to identify the owner/operator for law enforcement, security or safety purposes. The threats include an opportunity for use of UAS for nefarious purposes, and result in increased interaction between UAS and law enforcement officers. Requiring the external marking of the registration number to facilitate rapid identification of proper FAA registration will generally enhance law enforcement response to UAS incidents and facilitate improved interaction with UAS operators. UAS can be modified to carry explosive devices and manipulation of any component of the UAS, including the battery compartment, could trigger the device, putting law enforcement officers at risk.

On October 2, 2016, two Kurdish Peshmerga fighters were killed and two French soldiers were injured when an intact UAS operated by the Islamic State of Iraq and Syria (ISIS) detonated during inspection after being recovered. This is reportedly the first instance of a UAS designed as an improvised explosive device (IED) inflicting casualties. The ISIS UAS was the size of a model plane without external modifications and the explosive was reportedly hidden in the battery compartment, possibly disguised as a battery.¹ The weaponization of UAS is occurring domestically as well as overseas. In 2016, the FAA investigated video showing unmanned aircraft equipped with a handgun and a flamethrower.² In April 2014, the Federal Bureau of Investigation (FBI) arrested a 27 year old Moroccan national who had entered the United States on a student visa seven years previously. According to the criminal complaint, the subject expressed a desire to attack a federal building in Connecticut using a “remote-controlled hobby-type airplane” to deliver an IED.³ In another case, a 2011 FBI indictment detailed the arrest of a 26 year old U.S. person, who was a physics graduate and student from Massachusetts, in an undercover operation for plotting to build small explosives-laden remote-controlled aircraft to attack several targets in the National Capital Region. The subject was subsequently sentenced to 17 years in prison.⁴ Since 2014, FPS has investigated 123 incidents at federal facilities involving unmanned aircraft, which sometimes required evacuations and bomb squad response.

This expanding and more sophisticated UAS-related danger is inevitable, given the dynamic and evolving threat. Crashed UAS or those that have landed unattended are subject to inspection and investigation by law enforcement. Verification of valid FAA registration is one factor in the totality of circumstances that officers consider when determining if a crashed or unattended UAS should be considered suspicious, managed as a potential IED and require evacuations, shelter in place and bomb squad response. Registration information that is external and does not require handling of the UAS would permit safe collection of registration information without having to access the battery compartment or another closed compartment and would facilitate rapid assessment of the threat.

We appreciate your consideration of the Federal Protective Service request to amend the regulation to address this serious officer safety concern. If you have any questions and/or concerns, please contact Mr. Richard Swengros, Deputy Director for Operations at Richard.W.Swengros@hq.dhs.gov

Sincerely,



L. Eric Patterson
Director

¹ *Islamic State drone kills two Kurdish fighters, wounds two French soldiers*, REUTERS, (Oct. 12, 2016, 1:23 PM), <http://www.reuters.com/article/us-france-iraq-iraq-idUSKCN12B2Q1?il=0>.

² <http://www.dailydot.com/layer8/faa-drone-lawsuit-austin-haughwout/>

³ <http://www.courant.com/news/connecticut/hc-drone-terror-1030-20141029-story.html>

⁴ <https://archives.fbi.gov/archives/boston/press-releases/2012/man-sentenced-in-boston-for-plotting-attack-on-pentagon-and-u.s.-capitol-and-attempting-to-provide-detonation-devices-to-terrorists>