

February 21, 2018

The Honorable Dr. Fang Liu
Secretary General
International Civil Aviation Organization
999 University Street
Montréal, Québec
Canada, H3C 5H7

Re: The Regulation of Recreational Unmanned Aircraft Systems

Dear Secretary General:

On behalf of Flight Safety Foundation, which, as you know, is the only international, independent and impartial nonprofit organization dedicated solely to flight safety,¹ I would like to communicate our concerns regarding the relative lack of regulation of unmanned aircraft systems (UAS) or drones² for recreational purposes. Based on a number of recent incidents, we are increasingly concerned that uncertificated, untrained recreational drone operators are flying small UAS near airports and manned aircraft. Indeed, the proliferation and operation of small drones by people without aviation experience is becoming one of the most significant hazards to manned aviation. This poses unacceptable risks to aviation safety, and raises the potential for significant and perhaps catastrophic injury.

We urge ICAO to accelerate efforts to fashion appropriate Standards and Recommended Practices for drones, along with procedures and guidance material for States. We also urge all States to intensify efforts to develop proportionate and risk-based approaches for drone laws and regulations that ensure the public's safety, including by direct regulation of recreational drones, with adequate tracking and identification. We encourage States to consider mandating such technologies as geo-fencing, altitude limiters and line-of-sight controls for equipment used by hobbyists.

We commend ICAO for holding symposia, sponsoring workshops and forming a panel of experts and an advisory group, along with developing a concept of operations for drones operating under instrument flight rules conditions. We believe it is vital to adopt appropriate standards of airworthiness, remote pilot qualifications and educational awareness campaigns that are necessary for continued safe flight of drones. The relative absence of regulations for recreational UAS operations in some States, however, is alarming and unjustified.

Reports of near misses and collisions of drones with aircraft are increasing. Last week, a flight instructor and student pilot reported that their helicopter crash in Charleston, South Carolina, occurred as the pilots were taking evasive maneuvers to avoid a UAS. Because the FAA does not require in-flight identification and tracking capabilities, authorities have been unable to verify the incident, or identify the drone or its operator. A few weeks ago, a drone flew within feet of a Frontier Airlines aircraft on approach to McCarran International Airport in Las Vegas. In October 2017, a drone flew within five feet of the first officer's window on a commercial aircraft landing at London's Heathrow

¹ The Foundation participates in ICAO as a non-governmental organization.

² UAS are also referred to as remotely piloted aircraft systems (RPAS)..

Airport. Also last October, a drone collided with a commercial aircraft during final descent to the Jean Lesage International Airport in Quebec. In September, a recreational drone collided with a military helicopter near Staten Island, New York.

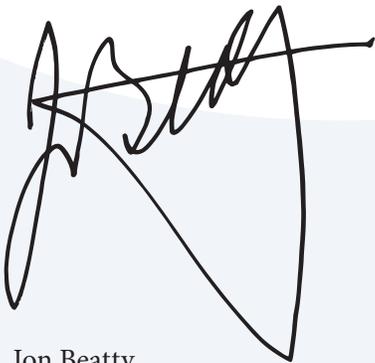
We fully recognize and appreciate the transformative nature and salutary public and private benefits of drones, but one thing is crystal clear: No justifiable bases exist to treat recreational drones any differently than drones flown for a commercial purpose. The risks to other aircraft and individuals not involved in the drone's flight are the same.

Leading civil aviation authorities, including the European Aviation Safety Agency, U.K. Civil Aviation Authority, Australia's Civil Aviation Safety Authority, Transport Canada, France's Direction Générale de l'Aviation Civile, the Civil Aviation Authority of Singapore and Japan's Civil Aviation Bureau, regulate commercial and non-commercial drones in the same manner, as they pose equal safety risks. On the other hand, several States, including the United States, have created different regulatory regimes for commercial and recreational drones, which largely leave the regulation of recreational drones to hobbyist organizations. Aviation safety must not be entrusted to voluntary hobbyist or lobbyist groups. As recreational drone operations grow, States should take action to close any gap between recreational or commercial drone rules and ensure that all operations are subject to governmental regulation and oversight.

In conclusion, the Foundation respectfully submits that a compelling public safety need exists for ICAO to engage and actively encourage States to adopt safety rules that protect the public against the increased safety threats posed by both recreational and commercial UAS, and that all States should directly regulate recreational drones to protect people on the ground, and general aviation, business and commercial aircraft in the air.

The Foundation looks forward to supporting your continued leadership in this area and many others.

Please accept, Madam Secretary General, the assurances of my highest regards and consideration.

A handwritten signature in black ink, appearing to read 'Jon Beatty', written over a light blue circular graphic element.

Jon Beatty
President and CEO
Flight Safety Foundation