

**Testimony of Emilio T. González
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Before the Committee on Commerce, Science and Transportation
United States Senate**

**Hearing on
“Unmanned Aircraft Systems: Innovation, Integration, Successes and
Challenges”
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Good morning Chairman Thune, Ranking Member Nelson, and Members of the Committee. I thank you for holding today's hearing on this extremely important topic, and for the opportunity to share my perspective as the Director of Miami International Airport.

Chairman Thune, your long-time friendship and support at the federal level is deeply appreciated, and it is a special honor to appear before your Committee today, sir. I am also especially grateful to Senator Nelson, not only for his invitation to speak at today's hearing, but for his leadership in the state of Florida and across the nation regarding this and myriad other pressing issues facing the aviation industry.

To put my perspective in context as it relates to unmanned aircraft, or drones, I wish to share a few relevant facts about Miami International. MIA had its seventh-consecutive year of growth in 2016, serving 44.6 million passengers. MIA also ranks as America's busiest U.S. airport for international freight, third-busiest for international passengers, and twelfth-busiest for total passengers. It offers more flights to Latin America and the Caribbean than any other U.S. airport, and serves more airlines than any other airport in America, with 109 passenger and cargo carriers currently on our roster.

MIA, along with its general aviation airports, is also the leading economic engine for Miami-Dade County and the state of Florida, generating business revenue of \$33.7 billion and handling \$52.8 billion worth of freight annually. We also welcome 70 percent of all the international visitors to Florida through our airport. Our aeronautical and non-aeronautical operations both continue to grow steadily, with non-aeronautical now comprising 35 percent of our revenue. Thanks to this growth, the Miami-Dade Aviation Department was able to set its first-ever \$1 billion budget for the current fiscal year.

Additionally, MIA is one of the 37 busiest airports in America that operate within what the Federal Aviation Administration classifies as Class B airspace, which is a larger, more restrictive area than the five-mile drone notification radius required at other airports.

It is also notable that of the 580,000 drone registrations across America, 35,000 of those are within the state of Florida, which accounts for six percent. As you can imagine, a large number of those registrations are from Miami-Dade County, Florida's most populated area.

These factors, in addition to South Florida's appealing weather and venues for outdoor activities, make MIA a prime case study to examine the effects, successes and challenges of safely managing drone use near our nation's airports. As we are all aware, the use of drones across the country continues to grow rapidly, which means the dangers associated with flying drones near commercial aircraft continues to grow as well. Safety and security, needless to say, are paramount concerns.

In fact, the FAA received reports of more than 1,200 drone sightings near aircraft from February 2016 through September 2016, in comparison to 874 sightings during the same period in 2015. Of those 1,200 drone sightings nationwide, 126 were in the state of Florida, which is one out of every 10. In all of 2016, the Miami FAA tower recorded 28 sightings near MIA, which is more than double the 11 sightings we had in 2015. With nine sightings already this year, we are on pace to record more than 50 events near MIA in 2017.

So while drone sightings nationally have risen 50 percent in the last year, MIA is experiencing a 100-percent increase annually, and other Class B airspace airports are undoubtedly seeing similar growth as well.

This high proliferation of drone use near our airport and others nationwide is dangerous at best, and the worst-case scenario would be catastrophic to our community, our local economy, and without question, to the national aviation industry as a whole. As drone technology becomes increasingly more widespread and advanced for recreational and commercial purposes alike, it is critical to our local and national security that airports get ahead of this serious safety threat instead of catching up to it.

Currently, the FAA only requires notification to the airport's air traffic control tower to operate a UAS within five miles of an airport, and for drones to be registered with the FAA and be less than 55 pounds. In addition, the FAA strongly encourages drone operators to operate in accordance with a community-based set of safety guidelines, such as those developed by the Academy of Model Aeronautics (AMA). Drone operation in Class B airspace is also prohibited without prior coordination and permission from the FAA.

I commend the FAA for crafting and approving the Part 107 guidance last June, which included several additional requirements for safe UAS integration. One such provision, which establishes no-drone grids around the immediate perimeter of airports, coincides with Miami-Dade County's ordinance for a one-mile no-drone radius.

Our measure, approved in January 2016 by Miami-Dade County Mayor Carlos Gimenez and the Board of County Commissioners, was Florida's first local drone safety ordinance. The ordinance prohibits drones from being flown within one mile of the end of our airport runways or half a mile from the runway's centerline, unless authorized by the FAA, and carries with it a civil penalty of \$500 – the maximum County fine available.

To make the public aware of our local ordinance and to promote drone safety, the Aviation Department initiated a comprehensive awareness campaign immediately after the passage of the ordinance. We began the campaign with media relations and social media efforts that included a press conference in March - just before schools went on spring break and when drone use was expected to increase. We now know that our expectations were accurate, since FAA statistics show the number of drone sightings from April to June were double the amount of any other three-month period in 2016.

Senator Nelson, thank you for joining us at that initial press conference, which generated more than half a million impressions through print, TV and online news coverage. The awareness campaign also included paid public service announcements by the Miami-Dade Aviation Department on the top English and Spanish radio stations last March, which reached more than one million listeners. In addition to leveraging traditional media, our online assets and paid advertising, the fourth component of our campaign has been community partnerships. At our request, neighboring municipalities and the local public school district joined in our community-wide effort by posting no-drone zone campaign materials on their websites and social media channels for additional exposure.

As members of an industry that is all about flight, we can certainly appreciate the public's interest in drones, but safety must remain paramount. So our campaign message was simple: fly your drone safely and responsibly – which means far away from our airports.

Moving forward, we are actively exploring geo-fence and other drone mitigation technology that can prevent drones from flying within our one-mile boundary. One developer of this technology provided a demonstration for MIA officials just two weeks ago. While we believe that we can mitigate unintentional incursions into our air space, the potential for deliberate UAS attacks continues to grow. Certainly, there are legal parameters and procedures regarding rules of engagement that still must be established between local law enforcement and the FAA. While my department is taking a forward-leaning approach to drone detection, tracking and mitigation technology, we also remain in active communication with our federal partners.

To that end, we are pleased with the FAA extension provision to establish a pilot program this year for airspace hazard mitigation at airports and other critical infrastructure using unmanned aircraft detection systems. Thank you, Senator Thune and Senator Nelson, for your leadership in having this critical section included. This new commitment of funding and resources is a positive start to strengthening local efforts to detect, track and mitigate unsafe drone use. Miami-Dade County welcomes the opportunity to pilot any and all technologies the FAA deems appropriate.

We also support an aggressive testing and knowledge component of the registration and regulation process. Significant progress was made on this front with the recent FAA ruling, which now requires drone operators to complete a pilot knowledge exam in order to receive a remote pilot certification. It is encouraging to see that more than half a million U.S. residents have registered their UAS, and that within the first two months of the rule taking effect last August, nearly 10,000 people took the pilot exam.

To achieve greater regulation and compliance, one of our recommendations is that drone retailers require that the pilot certification be required at the point of sale before purchase. We also recommend that the FAA build greater awareness and stronger partnerships with local law enforcement, to improve regulation at the community level.

Lastly, I applaud the FAA's formation of a Drone Advisory Committee and Unmanned Aircraft Safety Team, which held their first meetings this past fall. We look forward to seeing how these two partnerships between the drone industry and the FAA will help provide guidance to the FAA on gaps in its integration strategy and reduce safety risks to commercial aviation and the public.

In closing, on behalf of our country's busiest international freight airport and third-busiest international passenger gateway, I want to once again underscore Miami International Airport's emphatic support for legislation that establishes robust requirements for the registration, education, regulation and enforcement of safe UAS integration.

Conversely, as one of our nation's Category X airports at the highest risk of terrorist attack, I would like to reiterate our concern regarding the potential use of drones by those who wish to do harm at high-profile targets like airports. While we acknowledge the untapped recreational and commercial opportunities that drone technology presents, the inherent risks posed by UAS at this point from a major hub airport's perspective outweigh the rewards. I believe we echo the sentiment of airport operators across the country when I say that we urge careful, cautious and deliberate integration of UAS into our national air space.

Thank you again for the honor and privilege to offer my thoughts and recommendations to this esteemed body, and I look forward to working productively together toward our common goal of ensuring the safety and security of our nation's airports.