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*Dedicated to the Advancement of the International Helicopter Community*

Sen. Inhofe, thank you for the opportunity to speak today and provide perspective on how spectrum interference will have an impact on the aviation industry as a whole and, specifically, helicopters.

My name is Stacy Sheard. I am the current chairperson of Helicopter Association International. Since serving in the Army as a helicopter pilot, I have worked as a pilot for helicopter tours and air medical operations, as a production test pilot, and now as a captain flying corporate transportation. I have over 9,000 flight hours.

Through my years of flying, I can unequivocally state that GPS and satellite communications are essential to flight operations. Use of GPS is fundamental to the continued safe and effective operation of our industries and professions, where false or missing GPS data can easily result in a tragic accident.

The interference we are talking about does not mean slower Wi-Fi or an occasional dropped cell phone call. It means less-safe rotorcraft operations, the disruption of critical weather systems, and the degradation of emergency communications.

Helicopters are versatile aircraft, and because of their unique vertical flight maneuverability, helicopters take on many critical operations that occur at low altitudes, such as search and rescue, air ambulance missions, precision agriculture operations, pipeline and power-line patrols, and law enforcement. Such operations, even if conducted under visual flight rules, rely on GPS-dependent systems for obstacle and terrain detection. Such enhancements have proven to be effective at alerting pilots of potential conflicts and have been shown to significantly improve flight safety. These GPS-based enhancements are especially valuable during nighttime operations, in suboptimal weather conditions, and at locations where aircrews are unfamiliar with the local terrain. These GPS-dependent systems alert pilots of a conflict with an obstruction or terrain sufficiently in advance to allow the pilot to maneuver to avoid it.

Helicopter pilots live in low altitudes, often near flight obstructions. A loss of navigational reliability would be distracting for operators, increase crew workloads, and potentially make it difficult to safely navigate. For our members, who operate right in the thick of it, where there could be dense deployments of towers and potentially millions of Ligado handsets in operation, aircraft could potentially experience repeated loss of GPS and satellite air-to-ground communications when needed the most.

So what does this look like in the real world? Consider an air ambulance helicopter. It's a dark night and there is an accident on a highway in an area of steep terrain to which you are responding. You know you can conduct your flight safely and bring the accident victim to the medical care facility they so urgently need. But what happens when you can no longer rely on your navigation system due to interference?

What are our mitigation avenues? Replacing GPS and satellite communications equipment will be expensive, driving up costs for operators everywhere. For the economically hard-hit parts of our industry, this is an unacceptable additional burden.

We must also think about the future. Advanced air mobility brings to bear the possibility of autonomous flight. Under such conditions, without a human pilot onboard, ensuring the accuracy of GPS navigation obviously becomes even more critical.

Thank you, Sen. Inhofe, for your leadership on this issue. Our industry stands united with you in preserving aviation safety.