

Oral Statement

**Statement of Captain Tim Canoll
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Before the Aviation Subcommittee of the U.S. House of Representatives Committee on
Transportation and Infrastructure**

**"Ensuring Aviation Safety in the Era of Unmanned Aircraft Systems"
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As Prepared for Delivery

Thank you, Chairman LoBiondo, Ranking Member Larsen, and the subcommittee for the opportunity to be here today.

ALPA recognizes that unmanned aircraft systems or UAS can allow us to perform certain tasks more efficiently and safely than conventional aircraft. We also understand the value of advancing America's competitiveness in these technologies.

That said, ALPA's overarching concern is *safety*.

This summer, the FAA released hundreds of pilot reports on UAS sightings. Airline pilots' training helps ensure safety when we unexpectedly encounter a UAS, but the FAA numbers show more encounters are happening more often. Non-commercial and recreational UAS operations appear to be the primary source.

Here are a few examples:

Pilots operating an all-cargo flight near San Jose reported a “close encounter” with a UAS flying 60–70 feet to the left of the aircraft. They subsequently described it as “four-bladed and X-shaped.” As an airline captain I can tell you, if a pilot is able to report this level of detail, the UAS is way too close.

Also, multiple UAS were recently reported by three airliners on final approach to Newark Liberty International Airport. In April, a pilot reported that a blue metallic “drone” passed about 100–200 feet under the left wing of an airliner arriving at Seattle-Tacoma International Airport.

For pilots, these UAS literally appear out of the blue. They are much smaller than other aircraft. Some UAS do not have lights. They have limited contrast against the visual background. And they move much more slowly than airliners. As a result, these UAS are extremely difficult to see in flight.

[In this example](#), you can see how the white color of the UAS blends in with the sky. Imagine trying to detect this UAS while flying at 280 miles an hour.

The number of near-miss events that have occurred in such a short period of time demonstrates the risk. The growth in the use of these systems shows that the hazard will only increase.

The United States must put safety first. The FAA is making progress, but we need more. While work on a final rule regarding small commercial UAS operations is encouraging, the agency must immediately address *all* UAS operations, including recreational and non-commercial.

ALPA's recommended action plan has four elements:

Education

Anyone who plans to fly these UAS must understand the aircraft, the airspace, and the other aircraft that share it. For those who want to do the right thing, there are resources such as the "Know Before You Fly" campaign, of which ALPA is a supporter. But we also need to reach at the point-of-sale those individuals who may not yet appreciate the danger.

Individuals flying these UAS for recreation must adhere to the FAA guidelines, including any minimum age requirements, maintaining line of sight, and flying under 400 feet.

Registration

Gathering contact information about the UAS purchaser will not only allow authorities to immediately identify the owner, but it will also drive home the serious nature of operating these UAS.

Technology

If these UAS operate in airspace intended for airliners, or if they could unintentionally end up there, airline pilots need to be able to see them on cockpit displays, controllers need to see them on their radar scopes, and the UAS must be equipped with active technologies that ensure it is capable of avoiding a collision with manned aircraft.

If regulations restrict these UAS from operating in particular locations, the UAS must have technology that cannot be overridden to limit its operations. Penalties for those who deliberately violate them must be significant.

Penalties and enforcement

UAS pilots must be properly trained and understand the consequences of exceeding the operating limitations and possible malfunctions. Anyone deliberately flying a UAS recklessly should be subject to criminal prosecution.

Anyone who is operating a UAS and unintentionally deviates from rules and limitations should be subject to civil penalty. ALPA welcomes the FAA's recently proposed civil penalty against a UAS operator for endangering the safety of the airspace around New York City and Chicago.

With this four-part action plan, our country can capitalize on the economic opportunities offered by these UAS while maintaining safety.

Given the safety risk highlighted by the FAA's recent release of pilot reports, ALPA urges Congress to direct the FAA to regulate the UAS operated for recreation and hobby.

ALPA stands ready to help the FAA develop these regulations as part of realizing our shared goal of ensuring the safety of air transportation for all who depend on it.

Thank you.