

Good morning and my special thanks to Captain Moak and ALPA for inviting me to join in this important forum. In addition to these key aviation leaders, we add our thanks to Congressman Lungren for his efforts to pass legislation that makes the use of lasers against aircraft a specific federal crime.

- Let me begin my remarks by giving you a little perspective. As a retired military pilot and airline captain, I know this threat well and salute everyone here for their interest in this topic. One evening in the early 90s, while flying a Boeing 727 over Las Vegas at 35000 feet, I was amazed to see a huge green laser being shined into the clear night sky above the city. After trying to determine the source of the light (exactly the wrong thing to do), it became apparent to me that it was emanating from a large pyramid structure.....yes it was a casino. While this incident did not present a danger and I saw the laser from many miles away, this was a wake-up call for me personally, the airline pilot profession, and the airline industry.
- Professional pilots of all types – military, commercial, helicopter, and general aviation – consider lasers to be serious threats to the safe operation of their aircraft.

- America's airlines provide the safest possible mode of transportation to deliver passengers and goods across the globe. Despite all of the laser strikes reported each year, US commercial aviation is able to maintain this singular distinction because of at least two highly trained and professional pilots in each of our cockpits, the support of their companies and our regulator – the FAA.
- Unfortunately, the proliferation of lasers has accelerated in recent years and this growing threat is well documented in FAA reports from pilots and controllers.

Even though today's commercial aircraft are multi-piloted, they remain particularly vulnerable during the takeoff, approach and landing phases of flight.

- Let's look at the approach and landing situation. Good operating practice requires that one pilot concentrate on actually flying the aircraft with reference to instruments in order to maintain a stable airspeed and rate of descent on the final approach course and appropriate glide path. This pilot is "heads down." In

general, his attention as the flying pilot is focused inside the cockpit.

- We refer to the other pilot as the “pilot monitoring” or “pilot not flying” who must divide attention between monitoring the instrument approach and glancing outside for visual cues as the aircraft approaches a height at which a decision to land or abandon the approach must be made.
- This is the critical altitude, mere hundreds of feet above ground, when the “pilot monitoring” calls out “runway in sight” and the “pilot flying” must shift the scan from inside the cockpit to the runway environment characterized by bright approach lights, runway end identifier lights, centerline lighting, and runway edge lights - not to mention painted markings depicting the touchdown zone and runway remaining signage.
- These tasks are even more demanding when conducting approaches at night, because the pilots’ eyes are adapted to darkness. Their pupils are wide open, gathering information from dimly lit cockpit instruments or scanning through fog or mist to locate ground references that appear diffuse in the darkness.

- This environment can be suddenly penetrated by a sharp source of light of great intensity that reflects off the angled cockpit glass and could dazzle the pilots. This has caused temporary disorientation, flash blindness and a “startle factor” for numerous pilots – and in a very few cases – eye damage.
- Another risk is the temporary disruption in the ability to interpret their instruments and execute a safe transition to landing. Pilots might abandon the approach and execute a “go around.”
- Some may argue that automation is an easy solution, but pilots would have to rely on their tactile senses and memory of the location and function of certain switches and buttons, in the appropriate sequence, to re-engage the automation if their vision is impaired.

The public can well appreciate this external threat against the backdrop of national transportation security. As I previously stated, safety experts in our industry and regulatory environment have made great strides in reducing the risk of a fatal accident to the lowest point in aviation history. We attribute our success to working collaboratively to identify hazards, assess risks, and develop appropriate layered defenses

to control the risk, and avert a potential catastrophe. The proliferation of lasers poses a threat that we cannot control without the cooperation of our public, law enforcement agencies and the airport security network.

How do we improve this situation and reduce this threat?

- Today's forum is an important step in increasing the education of the public to these growing phenomena.
- Further, airlines and unions must work together to help educate pilots and provide robust reporting mechanisms so we can better measure the scope of this threat to the traveling public.
- America's airlines stand ready to partner with other members of the aviation community to ensure we keep this already safe system even safer.
- Administrator Babbitt; Captain Moak; America's airlines stand with you in helping solve this threat.

Thank you and I look forward to taking some of your questions.