



Visual Warning System Fact Sheet

The Visual Warning System (VWS) is designed to warn pilots who are violating the Air Defense Identification Zone (ADIZ) established by the Federal Aviation Administration (FAA) over Washington D.C. VWS is a ground-based system that uses safety-tested low-level beams of alternating green and red lights to alert pilots that they are flying without approval in designated airspace. These visually conspicuous lights, distinct from other light signals currently used by FAA Air Traffic Control, are designed to provide a clear warning to pilots who enter the ADIZ without authorization and cannot be contacted on radio by Air Traffic Control. The lights are so designed that illumination levels are eye-safe and non-hazardous at all ranges. Only aircraft that are unauthorized or unidentified and unresponsive would be visually warned. This visual warning is designed to prompt immediate action by the pilot to contact Air Traffic Control and exit the ADIZ. The FAA has issued a prominent Special Advisory Notice describing the lights and prescribing action.

The VWS system is considered a Class I laser device, that is, the safest class possible. It is eye safe at the aperture and all distances. The VWS is safer than laser pointers and can be directly viewed for extended time (up to eight hours). There is no eye hazard associated with viewing the beam. In comparison, green or red laser pointers are typically Class IIIa, which have the potential for causing eye damage if viewed beyond ¼ second. The laser power is much less than a sun glint and is less than the power for FAA regulated critical flight zones for commercial laser shows. What the pilots see is a bright dot of flashing red/green light that stands out among the many city and radio tower lights at night or scenery clutter during the day. The narrow beam of the warning light minimizes the probability that a non-intruder aircraft will be illuminated when the device is directed at an intruder aircraft. If another aircraft approaches the same azimuth and elevation as the intruder as determined by radar data, the warning will terminate. The VWS does not affect any aircraft systems.

Part of the overall layered defense of our nation's capitol, VWS provides those involved with securing the air space over the national capitol region a rapid means of contacting pilots when radio attempts have failed.