Aerospace Medical Association

President
Joseph P. Dervay, MD, MPH, FAsMA
League City, Texas

Executive Director
Jeffrey C. Sventek, MS, CAsP, FAsMA
Association Headquarters Office

320 South Henry Street
Alexandria, VA 22314-3579
Phone: 703-739-2240
Fax: 703-739-9652
www.asma.org

December 11, 2023

Susan Northrup, MD, MPH
US Federal Air Surgeon (AAM-01)
Federal Aviation Administration
800 Independence Avenue, SW
Washington, DC 20591

SUBJECT: Ultra Violet "C" (UV-C) Light Emitting Diode (LED) Technology as an additional component of the multi-layered risk mitigation strategy for aircraft disinfection

Dear Dr. Northrup,

On 21 November 2023, the membership of the Aerospace Medical Association (AsMA) passed a resolution on the use of ultraviolet "C" (UV-C) Light Emitting Diode (LED) technology as an additional component of the multi-layered risk mitigation strategy for aircraft disinfection.

This resolution advocates for the use of continuous inflight Ultraviolet "C" (UV-C) Light Emitting Diode (LED) technology in occupied aircraft cabins as an integral part of the multi-layered risk mitigation strategy for aircraft disinfection, with a special emphasis on the safety and well-being of aircrew members.

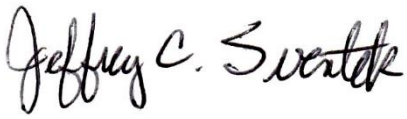
The AsMA resolution specifically states: **"The continuous use of UV-C aboard aircraft, below exposure limits, and with appropriate engineering safeguards, can be an additional synergistic, safe, and effective risk-mitigation layer to reduce disease transmission and translocation."**

The impetus for this resolution comes from the global health challenge posed by infectious diseases, as identified by the World Health Organization and Centers for Disease Control and Prevention. Despite advancements in aircraft cabin engineering and environmental control systems, the risk of transmission and spread of infectious diseases, including COVID-19, influenza, Respiratory Syncytial Virus (RSV), measles, tuberculosis, and the common cold, remains a significant concern. These diseases, transmitted through aerosols and surface contamination, necessitate robust air and surface disinfection measures.

UV-C LED technology, recognized for its microorganism inactivation capabilities since the late 1800s, operates in the 200 nm to 280 nm range and has been adapted to safely apply UV-C irradiation in occupied spaces, well below established exposure limits. This advancement is critical, considering there are no OSHA-mandated employee exposure limits for ultraviolet radiation. The shallow penetration depth of UV-C radiation and normal cell turnover mitigate potential superficial and transient skin and eye issues from UV-C exposure.

Thank you for your kind consideration of this most important effort to enhance the safety of global Aerospace Medicine operations. Please feel free to contact the Aerospace Medical Association's Dr. Kris Belland, Kris.Belland@Gmail.com or (850) 516-8416 if we can be of further assistance.

Sincerely,



Jeffrey C. Sventek, MS, CAsP, FAsMA, FRAeS
Executive Director