



DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration  
2098 Gaither Road  
Rockville MD 20850

December 11, 1995

To: All holders of approved variances for laser light shows  
and displays

Effective immediately, all outdoor laser displays within a radius of 20 miles of any of the operating airports in Clark County, Nevada are required to cease operation until the manufacturers and or operators can demonstrate that they are in compliance with the Recommended Interim Guidelines (RIGS), issued by the Federal Aviation Administration (FAA) and have established a specific quality assurance program to assure such compliance.

This letter amends all FDA approved variances applicable to the production and operation of laser displays that include projection into airspace in Clark County, Nevada. Organizations involved in the assurance of air traffic safety are expressing increased concern about the numbers of instances in which the interiors of aircraft cockpits have been illuminated by laser displays. This concern is exacerbated by those displays that are in the Las Vegas area because of the number of displays operating in close proximity to the McCarran International Airport. However, the safety considerations have much larger implications than the situation that exists in Las Vegas. Impairment of a pilot's or copilot's vision by exposure to the light of a laser display is intolerable. It makes little difference if the impairment is of short duration; all avoidable impairment should and must be prevented. Although this letter addresses displays in the Las Vegas area, we will not hesitate to extend its coverage to other locales or nationwide if we obtain information supporting the appropriateness of such action.

The quality assurance programs for the displays must be well documented and at least address such parameters as radiant power and energy, beam divergence, pointing accuracy, and scanning specifications. We will advise the industry if we become aware of any additional elements that are needed. Accurate and timely measurements and recordkeeping are also essential parts of the quality assurance program. Skilled engineers or technicians may be necessary to perform these tasks. Only if and when these conditions are met may resumption of operations be considered. Resumption may not occur until a detailed description demonstrating compliance with the RIGS and the quality control program and its results has been submitted to the FAA regional office and to this office and has been evaluated.

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This Agency has been engaged in meetings with several other Federal and local agencies, the military and industry. These meetings have resulted in the dissemination of interim guidance, Recommended Interim Guidelines (RIGS), issued by the Federal Aviation Administration (FAA) that are to be used in aeronautical studies of laser displays projecting into the airspace. These guidelines are intended to prevent ocular injury and also to prevent temporary visual impairment due to flashblinding or dazzle.

The conditions imposed by this notice are in addition to those already contained in approved variances.

I am sure that you share our concern for the flight safety of the public. We must all do our parts to prevent the occurrence of a tragedy that could cost hundreds of lives. Be advised that the primary responsibility for the safety of a laser display belongs to the manufacturer/operator of the display. It is that party's responsibility to be in control of the quality of the projections and to be sure that the equipment is operated in accordance with its specifications and in compliance with the guidelines for safety.

Please recognize that the interim guidelines of the FAA are interim and are subject to change as their science bases develop or if events occur that indicate that the guidelines are not effective in preventing future incidents involving visual impairment of aviators. We are confident that you will receive this notification in a spirit of cooperation and commitment to the public safety. There have already been too many instances of hazardous illuminations of aircraft by laser displays. Steps must be taken now to assure that they are stopped.

Sincerely yours.



Lillian J. Gill  
Director  
Office of Compliance  
Center for Devices and  
Radiological Health