

Federal Aviation Agency



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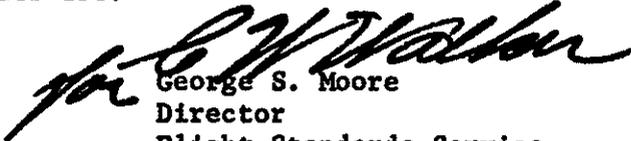
GENERAL OPERATING
AND FLIGHT RULES

EFFECTIVE :

3/16/65

SUBJECT : HAZARDS ASSOCIATED WITH IN-FLIGHT USE OF "VISIBLE-FLUID"
TYPE CIGARETTE LIGHTERS

1. **PURPOSE.** This circular discusses the potential hazards associated with in-flight use of "visible-fluid" type cigarette lighters.
2. **INFORMATION.**
 - a. For quite some time there have been reports of fire hazards associated with the clear (transparent) reservoir-type cigarette lighters. This type of lighter is described as one having a sealed fluid chamber separate from the wick compartment. The fluid chamber is sealed off from the wick compartment by a valve which normally remains in the closed position under a spring load. When fluid is desired in the wick compartment, the valve is pressed open, the lighter tilted, and fluid is drained into the compartment containing the wick. The valve is then allowed to close thereby shutting off the fluid.
 - b. Several occurrences of lighter fires in flight have been brought to the attention of the Agency indicating that with an increase in altitude, fluid from the chamber seeps into and floods the wick area or, prior to ignition, the user presses the valve allowing fluid to spurt into the wick area. This action with the pressure buildup in the fluid compartment due to the increase in altitude causes the lighter to flood. When the lighter is ignited, a fire of such magnitude occurs that the user is surprised and sometimes drops the burning lighter, causing a very serious fire hazard. This is an occurrence that has happened in flight aboard both airline and general aviation aircraft.
 - c. The seriousness of such an occurrence is obvious; and although the manufacturers of such lighters publish warnings regarding their use at altitude, the user does not always remember the warning or understand the potential hazard. Flight attendants or crewmembers observing passengers preparing to use this type of lighter in flight should caution them against its use.


George S. Moore

Director

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