



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
NATIONAL VEHICLE AND FUEL EMISSIONS LABORATORY
2565 PLYMOUTH ROAD
ANN ARBOR, MICHIGAN 48105-2498

FEB 1 2001

OFFICE OF
AIR AND RADIATION

Jack Saporito, President
US-Citizens Aviation Watch Association
P.O. Box 1702
Arlington Heights, IL 60006

Dear Mr. Saporito:

Thank you for your letter of November 16, 2000, to the Department of Health and Human Services, Centers for Disease Control and Prevention (CDC), Agency for Toxic Substances and Disease Registry, Jeffrey P. Koplan, M.D., CDC Director, in regard to aircraft fuel dumping (fuel jettisoning). Your letter has been referred to the Environmental Protection Agency (EPA) for response. We appreciate your bringing this issue to the attention of the EPA through CDC.

The EPA has regulations that prevent the venting of fuel after engines are shut down and on the ground, but there are no EPA requirements related to fuel dumping during flight. Under U.S. Federal Aviation Regulations (US FAR 121-703 (a) (11) of February 1996), each certificate holder must report failure, malfunction, or defect that caused a hazardous fuel leakage during flight. The Federal Aviation Administration (FAA) has informed us that fuel dumping occurs only about 127 times per year, when planes need to land for emergency situations, and cannot, because of excess weight. Air Traffic Control guidelines ("Air Traffic Control Manual," 7110.65L, 1998) specify that fuel dumping occur "at least 2,000 feet above the highest obstacle within 5 miles of the route or pattern being flown." Jet fuel evaporates quickly when dispersed in flight. When jet fuel is released at an altitude above 5,000 feet, the fuel is expected to evaporate completely before it reaches the ground.

A 1999 report issued by the Intergovernmental Panel on Climate Change, entitled, "Aviation and the Global Atmosphere," describes very rare emergency situations, where it may be necessary to release fuel to reduce the overall weight of an aircraft to safe landing weight.

Emergencies require jettisoning of fuel mainly are mechanical in nature, such as serious engine malfunction, or airframe structure failure. Severe illness of passenger(s) is also a major cause of emergency landings. Jettisoning of fuel is largely confined to larger aircraft flying long-haul routes. For these aircraft, the maximum landing weight may be significantly lower than the maximum take-off weight (both specified through certification by the manufacturer). In the event of an emergency that requires fuel to be jettisoned, airline instructions, as specified in aircraft operating manuals, and local procedures call for aircraft to climb to a specified altitude or to fly to designated fuel areas away from the population....

Fuel dumping is uncommon not only because it is an emergency action, but also because it is economically imprudent for an airline to take such action unless it is an emergency. Since fuel dumping is a rare event, and the fuel would likely be dispersed over a very large area, we believe its impact to the environment would not be serious.

We hope this letter will help answer your questions. Please contact us if you have any further questions.

Sincerely,

A handwritten signature in black ink, appearing to read "Chester J. France". The signature is fluid and cursive, with a long horizontal stroke at the end.

Chester J. France, Director
Assessment and Standards Division