

UNITED STATES DEPARTMENT OF THE INTERIOR AVIATION MANAGEMENT

Safety Alert

No. 05-01

July 20, 2005

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Subject: Flight Operations in Extreme Heat

Area of Concern: Aviations Operations

Distribution: All DOI Aviation Activities

Discussion: The extreme heat that we are currently experiencing, especially in the Southwest, has the potential to cause problems for both people and aircraft.

All pilots and managers should take extra precautions during extreme environmental conditions:

- Managers and pilots should increase their communication and coordination. Don't assume... clarify!
- Calculate your aircraft's performance. Don't guess... know!
- Download people, cargo, or retardant as appropriate. Be conservative!
- Review and comply with Flight Manual procedures. No shortcuts... follow the rules!
- Know and follow Interagency, Departmental, and Bureau policies. Professionalism requires both knowledge and self-discipline!

A recent case in point involves an event where an M18 (Dromader) single engine airtanker (SEAT) experienced a loss of power after takeoff (see SAFECOM 05-0435), which caused the pilot to perform an emergency jettison of its retardant before returning to the airport. The pilot suspects that the power loss may have been due to fuel vaporization caused by the prolonged heat wave. The pilot acknowledged that on that particular takeoff he had forgotten to use the emergency fuel pump (as required by the aircraft's flight manual for starting, run-ups, and takeoffs during the summer).

In this case, the extreme heat may have caused the fuel vaporization as well as distracted the pilot from completing an essential part of the run-up procedures.

However, the pilot is to be congratulated on keeping his head in the game, jettisoning the retardant, and for preparing for an emergency landing as he kept the aircraft flying. Always "fly the airplane" first, and never hesitate to jettison a load when you need to.

While we can't change the weather we can and must make an extra effort to limit the weather's effects on our aviation operations and ourselves.

/s/ Robert Galloway

Aviation Safety Manager