

EXECUTIVE SUMMARY

AIRCRAFT ACCIDENT INVESTIGATION C-130H, T/N 94-7315 MACDILL AIR FORCE BASE, FLORIDA 29 JANUARY 2009

On 29 January 2009, a C-130H, tail number (T/N) 94-7315, flew a Joint Airborne/Air Transportability Training mission over MacDill Air Force Base (AFB), Florida. The mishap occurred when the mishap jumper died after parachuting from the aircraft and landing in a lake near MacDill AFB. The mishap jumper was a member of United States Special Operations Command, assigned to MacDill AFB. The aircraft was based at Peterson AFB, Colorado, and assigned to the 302d Airlift Wing. No other individuals were killed or injured in the mishap or during the rescue efforts.

The mishap jumper exited the aircraft at approximately 0916 local time as the last of 9 jumpers on the first personnel drop of the day. He landed in a lake approximately 944 yards from the north edge of the drop zone (DZ), and rescue efforts were initiated at once. After swimming for 30 to 60 seconds and before rescuers could reach him, the mishap jumper disappeared below the lake surface. After 55 minutes of searching, rescuers located the mishap jumper, began administering first aid, and transported him to the nearest hospital where his death was pronounced.

Clear and convincing evidence shows the mishap was caused by inaccurate airdrop calculations, delays in the execution of the airdrop sequence, the mishap jumper's running with the wind in descent, and the mishap jumper's failure to employ his life preserver when he made an emergency water landing. Substantial contributing factors were the failure of the Tanker DZ survey to properly identify Gadsen Lake as a water obstacle within 1000 meters of the DZ, and noncompliance with a regulation requiring a manned safety boat on this water obstacle.

Inaccurate airdrop calculations were primarily a result of using inaccurate pre-mission information inflight and not fully accounting for changes in drop altitude, parachute type, and actual winds. Delays in the airdrop sequence were caused primarily by time compression during the operation which resulted in a green light call an estimated 4 seconds later than planned, followed by a 4 to 5 second delay in the jumpers' exit. The visual red light call was an estimated 5 to 8 seconds (482 to 719 yards) later than post-accident analysis shows it should have been called for the last jumper to have landed within the DZ boundary. The aircraft navigation computer did not serve as an effective backup to the visual call because it was programmed with inaccurate parachute and wind data.

When the red light was turned on, the mishap jumper was already past the ramp hinge and continued to exit. While this is standard procedure, his exit 1 to 2 seconds after the red light added an estimated 92 to 184 yards to his travel past the DZ. Upon exit, the mishap jumper ran with the wind, contributing an additional 8 knots of forward drive over the duration of his descent and adding an estimated 314 yards to his total distance traveled. Ultimately, the mishap jumper landed an estimated 944 yards off the drop zone. It is unknown why he did not activate either side of a fully-operational life preserver while in the air or in the water, which is standard procedure for water landings.

Under 10 U.S.C. 2254(d), any opinion of the accident investigators as to the cause of, or the factors contributing to, the accident set forth in the accident investigation report may not be considered as evidence in any civil or criminal proceeding arising from the accident, nor may such information be considered an admission of liability of the United States or by any person referred to in those conclusions or statements.