

Zane Brown
Aviation Accident Investigator
AS-WPR

Date: 02/11/2025

Subject: WPR25LA089 - N466TM - Lockheed C-130A

Contact: Director of Operations TBM Inc.

The mission was to perform a heavy platform drop of 25,000 lbs from 25,000 feet. The airplane had early load release due to loose platform. The load securement system consists of a dual rail system with a series of lock and latches that work through a ratcheting mechanism, to restrain load. When the aft cargo door is opened, the left-side locks are released, the right-side locks consist of a similar system but are collapsible when the load overcomes a preset tension. The load was intended to be extracted by use of a drogue chute and extraction chute, collapsing the right-side load retention system from the pull of the deployed extraction chute.

The airplane made a dry pass over the drop zone and then made a left turn to a 2nd dry pass over the drop zone at the request of the camera ship below. The airplane was then configured to drop on 3rd pass, and flaps were set to 10% deployed. While maneuvering the airplane to line up over the drop zone and maintain drop altitude, the load released early during the final turn into the drop run. The Loadmaster reported the load moving to the crew as per procedure. The load slowly moved back and pitched the airplane up as the load translated aft. When the load dropped out of the airplane, the plane pitched down, and the unrestrained crew became airborne within the cargo bay, resulting in the loadmaster breaking his ankle. The Physical Tech, also in the cargo bay, had an oxygen bottle on a shoulder strap and fell on the bottle during the event, resulting in a broken pelvis and rib. The airplane was undamaged. The event was not caused by a mechanical failure. The right-side locks were not set to proper tension by the loadmasters due to a misinterpretation of tech data. All crew complied with emergency procedures during load movement.

Recurrency training by Big Sky Aviation. Performing JAI "joint airdrop inspection" (independent inspection) for all future drops. Performed 100's of drops previously successfully. TBM consulted immediately with Big Sky after the accident.