

## EXECUTIVE SUMMARY

### AIRCRAFT ACCIDENT INVESTIGATION

420K AEROSTAT S/N 426, SITE DESIGNATOR: B-45

RIO GRANDE CITY, TEXAS

30 MARCH 2002

On 30 March 2002 at 0915 Greenwich Mean Time (GMT), a 420k aerostat (heavy-lift balloon) carrying an L-88A radar package broke free from its ground tether station and operating location in Rio Grande City, Texas, and began an uncontrolled flight, (commonly called a breakaway), over 300 NM across central Texas. The aerostat traveled from its operating location and landed in a privately owned, forested area near Burnet, Texas after damaging numerous power lines on its unintended travel. The mishap aircraft (MA) was managed by Air Combat Command Program Maintenance Squadron (ACC/PMS) and operated for air defense and aerial counterdrug interdiction through a contract with Lockheed Martin. The MA sustained minor damage on impact with the trees but was substantially damaged when removed from the crash site. There was significant damage to government property in the destruction of the aerostat, radar package, winch truck, and some damage to private property, however no injuries resulted. The aerostat and the radar package damage are estimated at \$3,603,875.90.

The mishap aircraft was launched on 26 March at 1743 GMT under normal conditions and remained aloft and on station until 30 March at approximately 0800 GMT. At that time, site personnel attempted to retrieve the aerostat due to poor weather conditions and negative indications of the balloon's status, until breakaway at 0915 GMT. Significant damage occurred when the landowner, under sub contract to Lockheed Martin, removed the package from the crash site without the supervision of Lockheed Martin experts.

There is clear and convincing evidence that weather conditions at the site resulted in wind forces and turbulence working against the balloon package that eventually caused the breakaway. Additionally, a malfunction of the Remote Deflation Device (RDD) was a complicating factor in continuing this accident but was not directly the cause of the breakaway.

There is substantial evidence that maintenance procedures were not adequate to prevent internal corrosion of the connection between the Remote Deflation Device (RDD) and the attached burn wire. The burn wire, when activated, would create a tear in the helium cell and allow the aerostat to settle to the ground quickly. The subsequent failure of the burn wire to activate allowed the aerostat to drift with the winds across central Texas.

*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 an aircraft accident, nor may such information be considered an admission of liability by the United States or by any person referred to in those conclusions or statements.*