

EXECUTIVE SUMMARY
AIRCRAFT ACCIDENT INVESTIGATION
TARS, T/N 4220, Marfa, Texas
14 February 2012

The Tethered Aerostat Radar System (TARS) is a program managed by Air Combat Command's Acquisition Management and Integration Center. ITT Exelis is the contractor responsible for operating and maintaining the Marfa TARS, which is manned solely by ITT personnel.

The mishap aerostat (MA) was launched on 14 Feb 12 from the Marfa TARS Site, Texas at 0421 Zulu (Z) (2321 local time), Flight #535, and remained aloft until recovery operations that culminated in the mishap. At 2115Z the Mishap Flight Director 1 (MFD 1) received an erroneous surface wind warning cancellation from the Mishap Telemetry and Control 1 (MT&C 1). This was not a cancellation, but an upgrade from a watch to a warning. The MFD 1 had knowledge of, and was briefed, on the upper level turbulence and pending high surface level winds from an electronic briefing received at 2300Z. At 2344Z, upper level winds and turbulence caused the MFD 1 to begin an adjustment. At 2350Z this adjustment became a recovery.

The Mishap Flight Crew 1/2 (MFC 1,2) that attempted recovery was a combined team of both the outgoing "B" crew and the incoming "A" crew. The joint MFC began recovery of the MA during shift changeover. At 0016:34Z the MA was hit by 55.2 knots (kts) of wind at 5720' MSL. The surface winds at this time were SSW at 22 kts. Due to the severe winds on the MA the Mishap Winch Operator 1 (MWO 1) made the decision to rapidly outhaul the MA. During this outhaul the MA began the pitch-over which culminated with impact into the ground at 0017:13Z. The MA ruptured and completely destroyed the airframe and associated equipment.

The total loss and damage was estimated at \$8,819,488.00. There were no injuries or significant damage to private property. Less than 1 gallon of diesel fuel spilled and was immediately cleaned up and disposed of at a cost of \$147.00.

The AIB President found by clear and convincing evidence that the cause of the mishap was a delayed decision to recover the MA. Additionally, the AIB president found by a preponderance of the evidence, that the lack of training for the flight directors on weather data interpretation and their lack of training on weather equipment use, as well as the erroneous surface wind warning cancellation were significant contributing factors to the mishap.

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.