

United States Air Force Ground Accident Investigation Board Report
Sun Shelter Collapse
Nellis AFB, NV
8 September 2011

EXECUTIVE SUMMARY

On Thursday 8 September 2011, the 57th Wing and two TDY units, the 388th Fighter Wing from Hill AFB and the 23^d Wing from Moody AFB, were conducting live ordnance flying operations from the revetments area on the south side of the Nellis AFB ramp. The revetment parking spaces were covered by a sunshade installed between 2000 and 2004. Cable bracing required for structural stability of the sunshade was loose, damaged or missing in several areas. The cables had not been inspected or maintained since the sunshade had been installed.

At 1500 hours, the 57th Aerospace Maintenance Squadron swing shift came on duty and prepared to launch F-16 sorties. At 1631 hours, a high wind advisory was issued for winds between 25 to 35 knots until 2000 hours. Maintenance personnel at the revetments took precautions to close aircraft canopies and remove equipment from the aircraft. At 1655 hours, the weather advisory was updated to reflect potential winds between 35 and 50 knots until 1900 hours.

At approximately 1657 hours the tower noted that a gust front hit the airfield reducing visibility to zero. A wind gust of 56 knots was recorded at 1658 hours on the Nellis AFB airfield. Between 1658 and 1700 hours, the 2,500 foot long, 75 foot wide revetment sunshade collapsed. Without the necessary lateral support from the cables, the strong wind gusts cause the sunshade to collapse suddenly. The collapse was described as occurring in a manner similar to a sheet of ice sliding off of a roof. Other personnel on scene but not underneath the structure could not see the collapse due to severely reduced visibility.

Immediately after the sunshade collapsed, maintenance and security personnel searched the site and identified approximately 40 personnel on scene but none were severely injured. Eight personnel were identified as having sustained injuries warranting medical attention. All personnel were subsequently treated and released.

Ten F-16 and two A-10 aircraft sustained damage from the collapsed sunshade. In addition, four AIM-120 missiles mounted on the aircraft sustained damage. Twenty-one pieces of aerospace ground equipment and nine government-owned vehicles were also damaged in the collapse. The estimate of damage was \$7.4M. No other individuals, aircraft, equipment or facilities were injured or damaged.

After shutting down power and shutting off the in-ground aircraft refueling system for the area, Explosive Ordnance Disposal personnel safed the munitions. Maintenance and civil engineer personnel used cranes to lift the portions of the collapsed structure resting on each aircraft and then manually push each aircraft out of their parking locations.