

PROJECT PROFILE



Project Basics

Project Name: Camp Guernsey Army Airfield Wind Uplift Project
Agency: Army National Guard, Camp Guernsey, Wyoming
Installation Date: May 2013
Product Type: Western Excelsior Xtreme Armor System™ (XAS) utilizing PP5-Xtreme with Percussion Driven Anchors (PDAs)

Project Overview

The Camp Guernsey Army Airfield sought out a design to armor the airfield runway shoulders from strong wind uplifts. The shoulders along the runways were experiencing wind erosion from the over 300 mph winds created from the large aircrafts. The erosion prohibited a healthy stand of vegetation, leaving bare, native soils. The Xtreme Armor System (XAS) was selected to protect the shoulders and promote vegetation along the runways. Once in place, the XAS eliminated dust and stabilized debris. The completed installation yielding a reinforced, vegetated stand saving millions in repair costs for runway lighting and aircraft engines.

Installation

The High-Performance Turf Reinforcement Mat (HPTRM) was installed along the runway shoulders over a prepared and seeded soilbed. Once in place, the HPTRM was secured by PDAs placed at a 1.5 anchors/sy spacing. Western Excelsior aided in the wind uplift design to ensure stability in the extraordinary wind conditions. Together the HPTRM and PDAs form a system that offers strength and support, resistance to wind uplift, and reinforcement of the vegetation stems and roots.

Performance

The Xtreme Armor System has met or exceeded all expectation for the system. Within weeks, the reinforced shoulders started to vegetate and a stable design was achieved during the following summer growing season. The XAS offered a cost-effective, green alternative while providing a high-strength system to withstand the wind lift potential at the airfield.



The XAS installation along the runway shoulders (top), completed system with PDAs (middle), protected the soils and vegetation from wind lift. One year later the site remains stabilized (bottom).

Copyright 2018.

Western Excelsior
4609 E. Boonville-New Harmony Rd., Evansville, IN 47725
(866) 540-9810 | www.westernexcelsior.com

