Arcturn Defense Solutions LLC North Carolina, USA contact@arcturn.llc arcturn.llc

OVERVIEW

Arcturn Defense Solutions works in satellite ground systems. The firm is built on time spent operating, maintaining, installing and engineering that equipment, and the work reflects it: **analysis that matches how stations actually behave**, software built around the task it supports, and **training aimed at extending the service life of the system**.

CORE COMPETENCIES

Ground-segment telemetry analysis

Turning the records a station already produces into evidence: drive degradation, tracking-error signatures, signal margin, dropout forensics, and fault and interlock behaviour that resists a straightforward reading.

Operator and maintainer training

Instruction for the people who run, maintain, install and commission ground-segment equipment, written against the customer's own systems rather than a generic syllabus.

Purpose-built software

Tools built to a stated need, for the cases general-purpose software handles badly. Built so the understanding stays with the customer rather than with a vendor.

Systems engineering and analysis

Consulting systems engineering across the RF chain: acquisition and tracking behaviour, servo and drive performance, commissioning baselines, and the measurements later comparisons depend on.

DIFFERENTIATORS

- **Worked the equipment, not just specified it.** The founder has held the ground segment as an operator, a maintainer, an installer and an engineer, so the tools and the instruction are built by someone who has sat in the same chairs as the people who use them.
- **Vendor-neutral core by design.** Record formats sit behind a common interface rather than inside the core, so an unfamiliar system needs an adapter written against one example dataset, not a rewrite. A modular open systems approach is the default, not an add-on.
- **Built for sensitive data.** Where the records are sensitive, processing happens in the browser on the operator's own machine rather than being uploaded for handling elsewhere.
- **Small, and intending to stay small.** The customer deals directly with the person doing the work. The measure of a good engagement is that it leaves less need for the next one.

CURRENT WORK

Sentinel Pass Analyzer

GROUND-SEGMENT ANALYTICS · BUILT AND MAINTAINED BY ARCTURN

A browser-based analyzer for satellite-antenna pass reports. It reads the records an antenna control unit already writes and returns servo and signal analysis, fault and interlock timelines, dropout forensics, and diagnostics that state the measured condition and the values behind it rather than only flagging that something looks unusual. Analysis runs in the browser: a pass is never uploaded in order to be read.

Batch analysis aggregates hundreds of passes into sky-coverage heatmaps, torque profiles and trend series, so a slow mechanical drift becomes visible well before it becomes a failure. Multiple antenna control unit record formats are supported through the same interface.

BUSINESS INFORMATION

LEGAL NAME	Arcturn Defense Solutions LLC
ENTITY	Limited liability company, North Carolina
FORMED	2025
OWNERSHIP	Veteran owned
SIZE	Small business
UEI	PFQ2JT8P12G3
CAGE	Assigned on completion of SAM.gov registration
SAM.GOV	Registration in process
EMAIL	contact@arcturn.llc
WEB	arcturn.llc
NAICS	541330 Engineering Services · primary 541511 Custom Computer Programming Services 611430 Professional and Management Development Training
PSC	R425 Support, Professional: Engineering/Technical U006 Education/Training: Vocational/Technical U008 Education/Training: Training/Curriculum Development