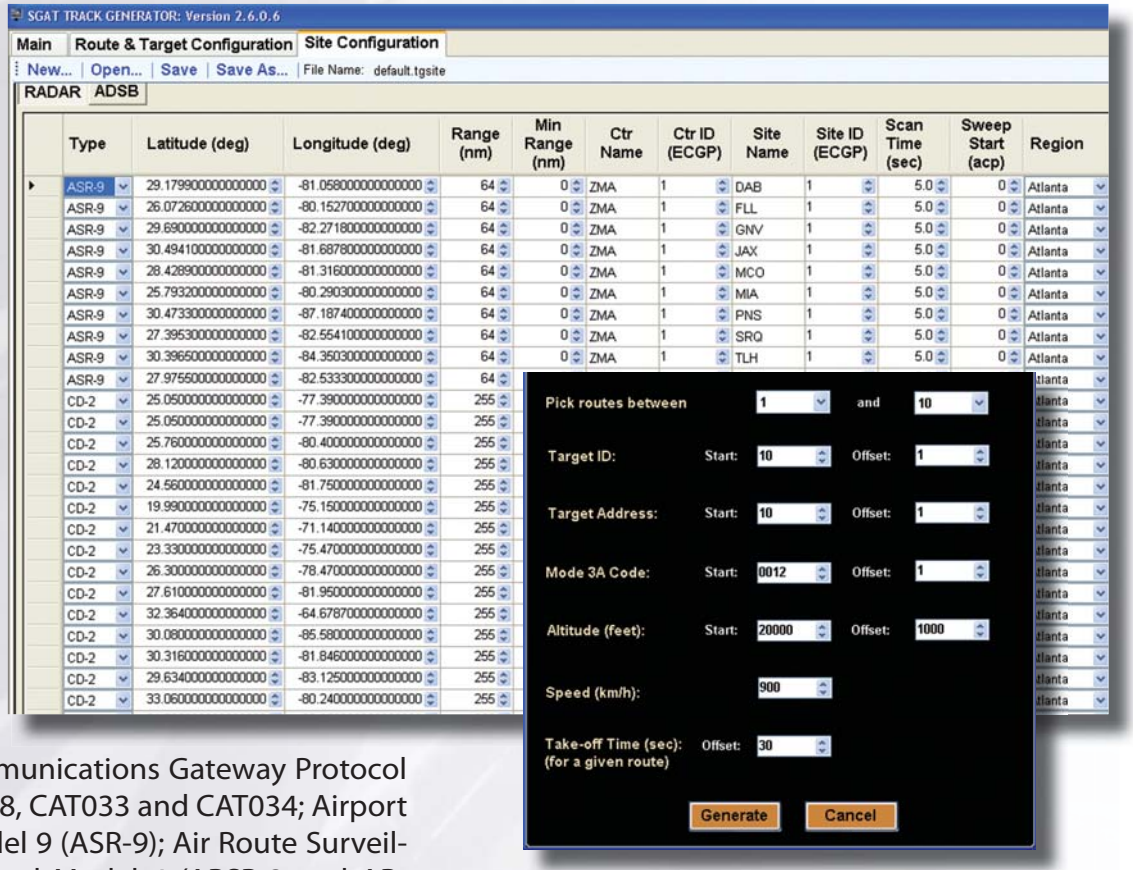
SUNHILLO
Mission-Critical Data Interoperability

Surveillance Generator & Analysis Tool

- Correlates ADS-B and RADAR
- Dynamic Data-Driven testing
- Verification and Validation tool
- Agile test case scenarios
- User-specified target data
- Generates surveillance tracks
- Supports legacy RADAR data
- Live Playback capability
- Simulates alarms

Sunhillo's Surveillance Generation and Analysis Tool (SGAT) Track Generator supports legacy radar data, ADS-B, and correlated (ADS-B/radar) target information with the ability to simulate high data loads, alerts, and excessive target data—excessive in the range of thousands to thoroughly stress Air Traffic Systems during high service volume loads.

This powerful tool provides realistic simulation, as well as track generation to "auto-generate" surveillance tracks based on user-specified site, route, and target information and is capable of saving this information for scenario creation and future playback.



The built-in Generator software provides message control parameters for a variety of common surveillance data formats, such as: En Route Communications Gateway Protocol (ECGP), ASTERIX, CAT048, CAT033 and CAT034; Airport Surveillance Radar Model 9 (ASR-9); Air Route Surveillance Radar, Model 3 and Model 4 (ARSR-3 and ARSR-4); Common Digitizer, Mode 1 and Mode 2 (CD-1 and CD-2); Minimally Attended Radar (MAR) / FPS-11; and other protocols and formats.

Sunhillo Corporation . 444 Kelley Drive . West Berlin . NJ . 08091 . Tel 856.767.7676 . Fax 856.767.9557 . Email sales@sunhillo.com
www.sunhillo.com

Surveillance Generator & Analysis Tool

The primary benefit of the software suite is its ability to deliver simulated data inputs to an ADS-B network as an alternative to live testing, which may use relatively unknown and uncontrolled data inputs. The software's stimulus is very controlled, predictable and accurate. This condition provides:

- Tight control over details of the test case
- Repeatable scenarios that can be saved and adjusted as necessary

The user configures the specific details of ADS-B and radar sites. Routes are defined using start and end longitude and latitude. Targets for service volumes and routes are created and configured (i.e. speed, altitude, codes, IDs, etc.) per user requirements. The SGAT Track Generator automatically transmits the alarm bits at the designated intervals on a per site basis. A built-in LAN Reader analyzes or "sniffs" ECGP data packets real-time on the LAN and displays details of the data within these packets. These details include a running count of types of surveillance data messages per channel, Air Route Traffic Control Center (ARTCC), Site, surveillance data type, and total message counts. The LAN Reader provides filter options for particular ARTCC, Site or message type. The ECGP data on the LAN can be recorded into data files for replay by the SGAT File Player.

Sunhillo Corporation . 444 Kelley Drive . West Berlin . NJ . 08091 . Tel 856.767.7676 . Fax 856.767.9557 . Email sales@sunhillo.com
www.sunhillo.com