

# **AATS SOFTWARE**

## Antenna Alignment & Tracking Software Features

#### TRACKING / ALIGNMENT

- Ability to Track/Align using RF Only, GPS Only, or a combination of both RF and GPS
- Coordinated Tracking/Alignment between two BATS units for better tuned link (BATSync)
- o GPS Targeting
  - Ability to target specific coordinates during scanning to speed up link acquisition time
  - Ability to specify the number of targets in a specified distance that should be targeted
  - Ability to Scan/Track/Align mobile targets with the Use of a Out-Of-Band or In-Band Network GPS Stream (such as using the BTS-AUTO-RGI)
- o Spatial Awareness (Geofencing) ability for Tracking/Aligning
  - Ability to only look for targets inside/outside a specified distance
  - Ability to change currently Tracked/Aligned links according to a specified distance
- Coordinated Scanning of targets between multiple BATS in the same location (two or more BATS on a single vessel are aware what the other systems are doing) (This is called Fleet Sync)
- Validation ability to validate and ensure the link is connected to the proper base station/remote end.
- Ability to control Group Access IDs, Link Names, etc. depending on target\* (this applies only to certain radios, such as the Cambium PTP series.
- Self-Healing When a link is lost, the BATS automatically begins searching for a new link, including reacquiring the last connection before moving to a different target (if available).
- Ability to wake up other targets when BATS equipment is installed on the other end (Again, with out of band or RGI)
- o Ability to begin Scanning/Tracking/Alignment of targets when BATS is powered on
- BATS can establish a known good link with any of the following parameters:
  - RSSI/RSL
  - SNR/Mod Cod/Inverse Vector Error (Can be used to set Modulation)
  - Link Speed\* (only on certain radios)
  - GPS Coordinates\* (when in GPS Only Mode)
- Target list can contain 100 targets, for easy world wide deployment without managing target list constantly
- Ability to manage Targets from CSV uploads, making Target Management easy

#### **OPERATION FEATURES**

- Ability to act as a secondary GPS NMEA server (when fed information from a primary source)
- VLAN Capable
- o Ability to place into stow mode for mobile deployments
- Link Health Checks to assist with modular routing applications (multi-wan)

### ADDITIONAL FEATURES / TOOLS

- Graphing Tools
  - RSSI vs Time
  - SNR vs Time
  - Link Speed vs Time
  - Heading vs Time
  - Pitch vs Time
  - Roll vs Time
  - RSSI vs Azimuth
  - SNR vs Azimuth
- o Target Map
  - Ability to see Targets/Links on a Google Earth Overlay
  - Ability to upload Google Earth Overlay for Coverage Maps
  - Ability to upload Offline Maps for BATS without internet access
- o Device Discovery Tool
- o Logging
  - Scanning/Tracking
  - Errors
- Remote Logging/Syslog
- SNMP Monitoring
- Bandwidth Test Server/Client
- User Management
- o Command Line Interface (SSH and Telnet)
- HTTPS is standard, with ability to upload customer SSL certificates (HTTP can be used, but is disabled by default
- Ability to display Metric and SAE measurements
- Login Banner/Warning