



ASSET TRACKING & INCURSION MANAGEMENT SYSTEM



For ground vehicles operating in aircraft movement areas.

Providing vehicle operators precise location details and warnings for any impending safety issues.



**GPS Vehicle-based Configured to all
Airfield Zones**

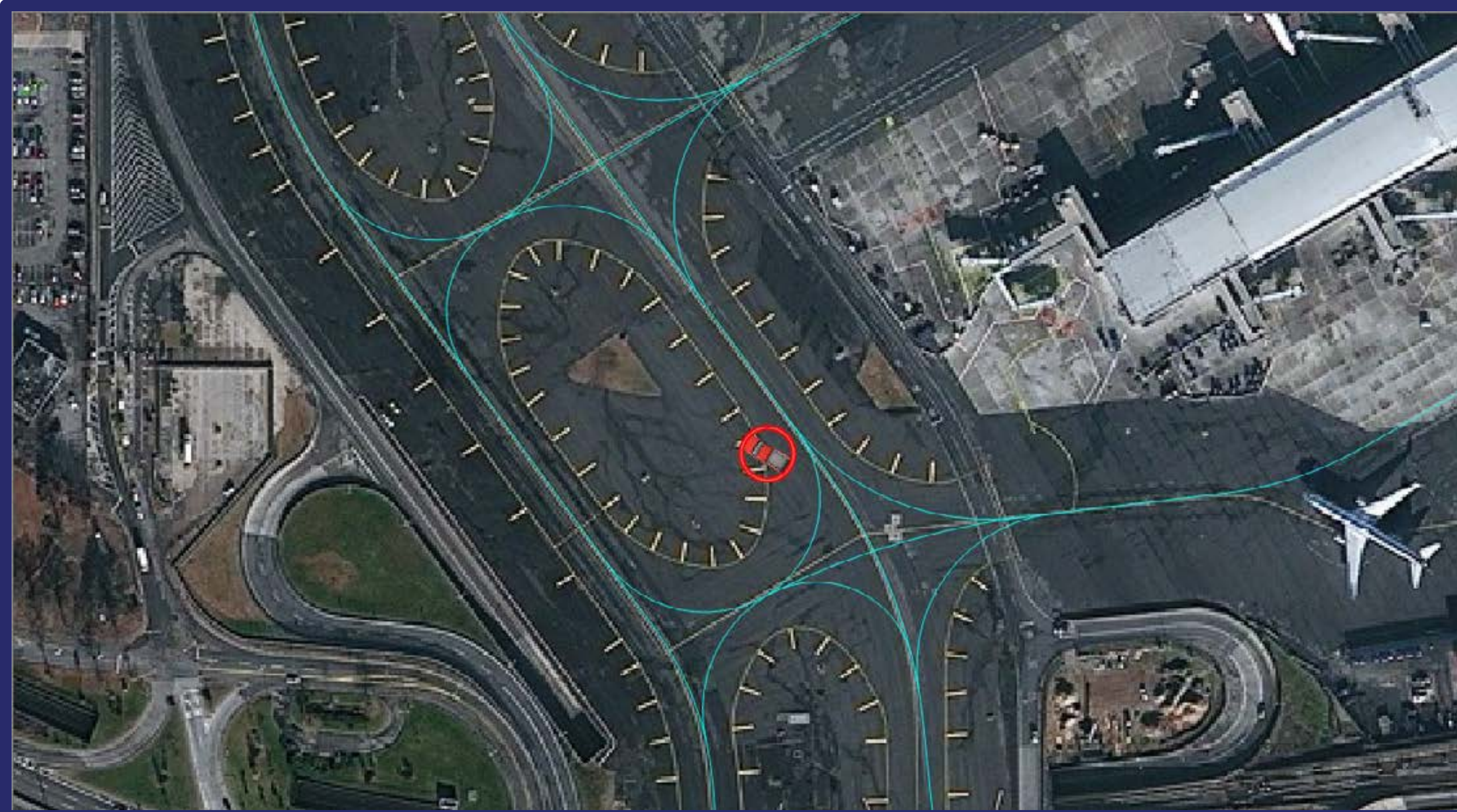
DELIVERING ALERTS

**For Hold Line Markings, ILS Critical Areas,
Runway Safety Areas and “hotspots”**

**Both standard and non- standard dimensions
and other areas as required**

**ATIMS is compliant with FAA Advisory
Circular 150/5210-25 “Performance
Specifications for Airport Vehicle RIWS”**





Accurate - down to meters
in real-time.

Geo-Fences identify restricted
areas and audible warnings.

View, command and control
airfield operations from your
desktop or any equipped station
using an actual orthographic
image of the airfield.

Equipped vehicles appear
on screen.

Records vehicle speed and
direction of travel.

Alerts operators to specific speed
limits within safety zones.

Note: ATIMS Lite does not meet current requirements for FAA Advisory Circular 150/5210-25 "Performance Specifications for Airport Vehicle RWIS".

ATIMS™ LITE

For audible & visual alerts and vehicle tracking.

The unit has a large Bi-color (Yellow / Red) indicator lamp that can either flash or remain on depending on the nature of the alert. The three icons at the left indicate that various key aspects of the unit are functional. The blue check mark means service the software services has started, the yellow wireless icon means that there is wireless connectivity to the server, and the green GPS icon means there is a valid GPS fix.



Flexible, powerful configuration options and management tools.

Can be configured as standalone or a networked solution across numerous airfield vehicles and assets.

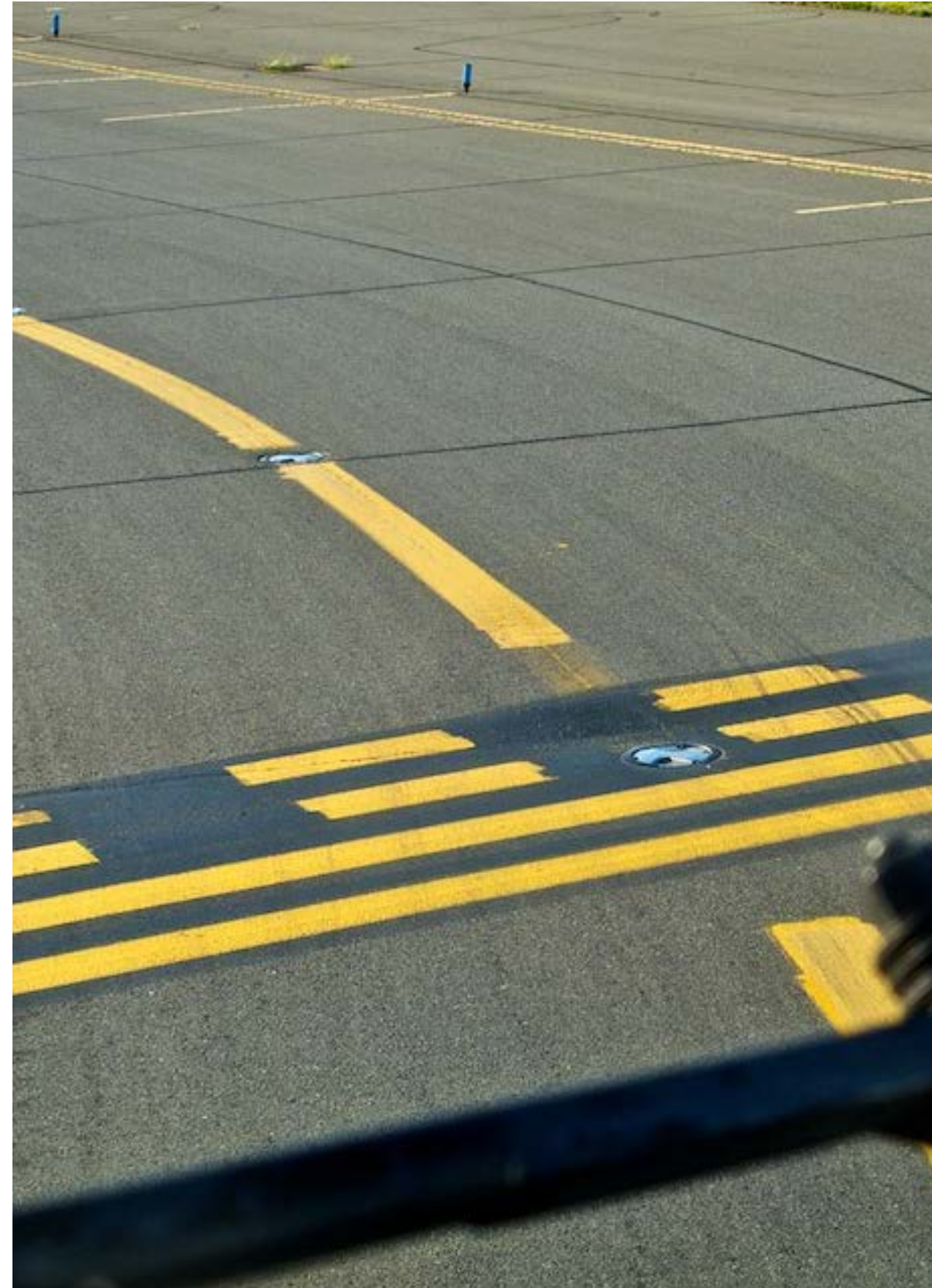
Allows management to view all vehicles on the system or layer the system by viewing specific vehicles, i.e. view only Operations and Follow Me vehicles.

Each vehicle is tagged for easy identification

Attributes of vehicle operations can be collected and stored such as vehicle speed, route traveled etc. right on the desktop from any equipped/connected workstation.

Using an orthographic image of the airfield, ATIMS™ equipped vehicles appear on screen where the manager can see where they are, what they are doing, where they have been, and what they have done.

Unbiased data when investigating incursions or unsafe driving complaints such as speed or stop sign infractions.



FUNCTIONALITY

A computer such as a Panasonic Toughpad is mounted in the cab of a vehicle, which displays the vehicle's position (determined from GPS data) in real time on a map of the airport.

If multiple units are connected using a wireless network, then each ATIMS™ vehicle display can also display the positions of all other ATIMS™ vehicles or just pre-defined groups of vehicles in the network in real time.

In the case of ATIMS™ 'stand-alone' version the vehicle position will be displayed just for that particular vehicle.

A wireless communication link is not necessary to alert the vehicle operator, as this data is stored in the unit's local processor, and hard drive. Warnings will go off even if the connection is lost. Location data is saved on the Toughbook or ATIMS™ lite box and will update server when connection is regained.

Based on the location of the vehicle both audible and visual alerts will be activated, when the vehicle is in close proximity and inside defined geo-fence areas. These alert messages are defined by the specifications listed in FAA Advisory Circular 150/5210-25. The ATIMS™ user can define additional geo-fence locations and create custom visual and audible response messages based on the vehicle entering these other locations as well.

For an administrator, a web service, using a compatible Windows based browser on an office computer, displays all ATIMS™ and ATIMS™ LITE equipped vehicle positions on the airport map with updates every second.

The screenshot displays the AVTWS Server interface. On the left, a map shows a road network with three vehicles: Staff 38 (speed 24 kmh), Staff 58 (speed 24 kmh), and Staff 32 (speed 31 kmh). A 500-metre scale bar is visible. The top menu bar includes File, Zones, Vehicles, Alerts, Network, Options, and Help. The bottom toolbar contains buttons for EXIT, Zoom IN, Zoom OUT, Reset View, Remove on-screen Alerts, Send Message, and Reports.

On the right, a dialog box titled "Send a text message or play sound file on vehicle(s):" is open. It has the following fields and options:

- Message type: Sound file: Approaching restricted area, call 121.9
- Text message: Please call supervisor
- Select one or more vehicles to send to: A list containing Staff 58 (vehicle ID# 0), Staff 32 (vehicle ID# 1), Staff 38 (vehicle ID# 2), (vehicle 3) (vehicle ID# 3), (vehicle 4) (vehicle ID# 4), (vehicle 5) (vehicle ID# 5), (vehicle 6) (vehicle ID# 6), (vehicle 7) (vehicle ID# 7), and (vehicle 8) (vehicle ID# 8). Buttons for "Select All" and "De-select All" are present.
- Options: Volume (slider from Min to Max) and Warning lights: Normal (solid green), Flashing green, Solid red, Flashing red.
- Buttons: Cancel and Send Now!

REPORTS

Incursion Report - You set the date range, what RIWS zones to include, what type of Incursion (Approaching, Entering, Leaving), which vehicles to include and it shows you all incursions that meet those criteria. This report can be printed or saved as a PDF.

Vehicle Playback - You set the Date and Time range, which vehicles to include and it shows you the trails of all the vehicles you include. The vehicle playback is viewable on the website only.

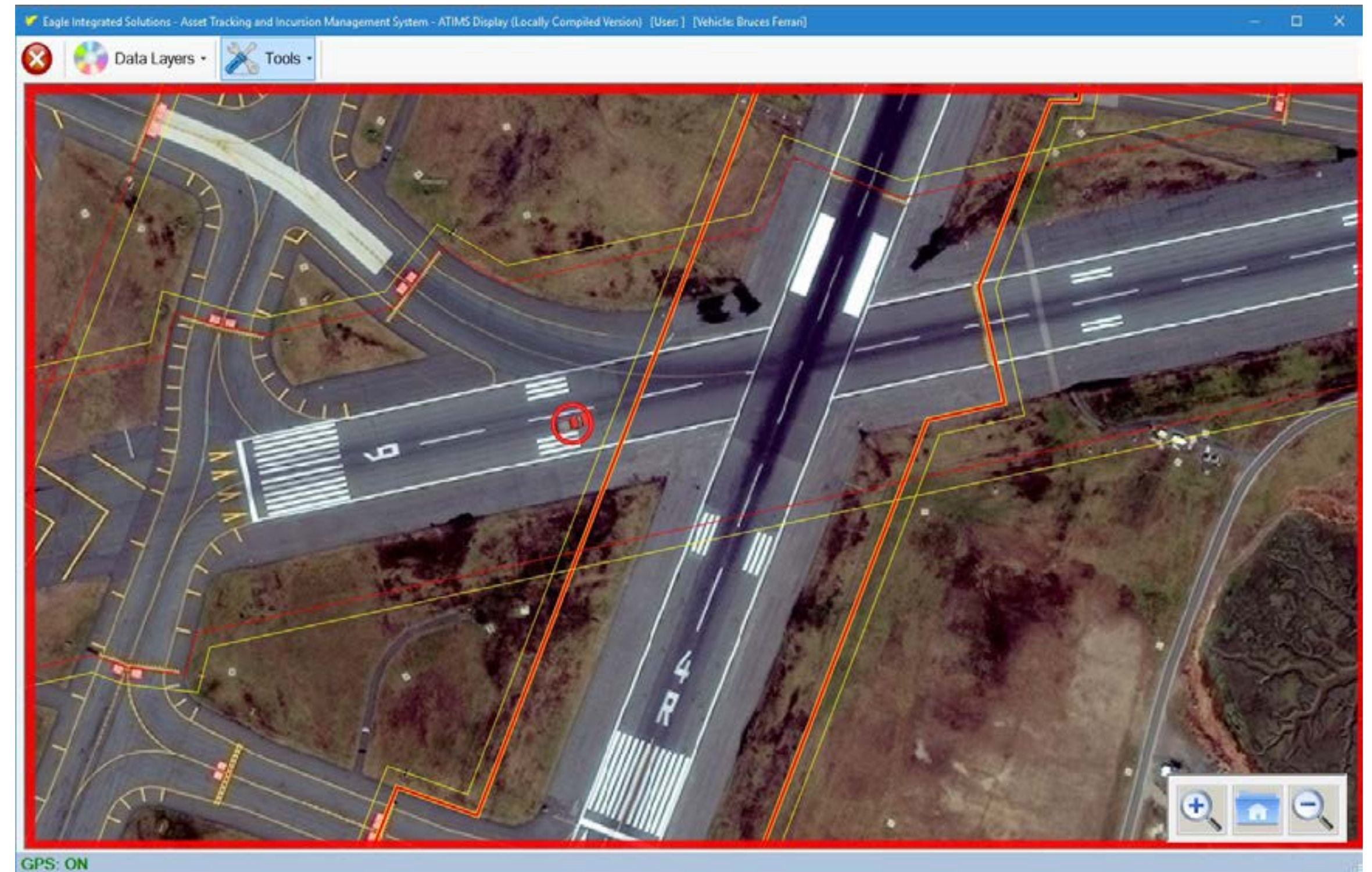
SYSTEM COMPONENTS

Server:

- Hosted on a Web Service that any desktop or mobile workstation with a compatible browser can view the screen map, and track all active vehicles, and run reports.
- Runs the Server Service that communicates with the vehicle portion of the system receiving GPS location information. In the case of the Map display version of ATIMS the Server Service also sends all other vehicle position info for display.
- Provides a Administrator User interface to change the configuration of the map, CAD, and alert files for any, or all vehicles on the system.
- In conjunction with a SQL Server the Server Service manages historical data for vehicle activity for playback and reports.
- Note: The Server and SQL Database can be either locally hosted by the client or Cloud based on the Internet.

Vehicle Computer device, either with a Display, or without a Display:

- Receives data from its onboard GPS receiver as to location, speed, heading, etc.
- Interprets the location from the GPS and determines if an alert is required, as the vehicle may be in an alert polygon (incursion zone) on the airfield map.
- For Display type units, displays the vehicle position on the map, as well as all other vehicle positions in real time at 1 second update intervals.
- Provides a configuration application that can set GPS receiver properties, and Network Server and Vehicle IP address, and Vehicle Properties.





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**CONTACT US FOR MORE
INFORMATION**