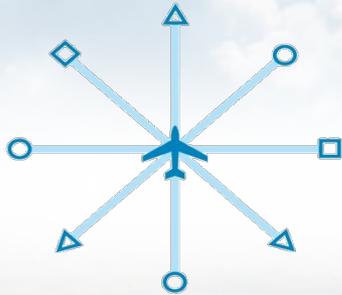


The Power of Spatial Airport Asset Management Systems



SAAMS



What is AAAE?

- World's largest professional association for airport employees (4,500+ members)
- Airport representation on Capitol Hill
- Accreditation programs
- Conferences
- Computerized training
- Cloud computing

www.aaae.org



What is a Geographic Information System (GIS)?

- Hardware + Software + Data + People = GIS
- Used to manipulate, analyze and present information that is tied to a *spatial location*
 - How many lights are on my airfield? What kind of lights are they? What is their maintenance history?



Who is Using GIS and Why?

- Are any of you?
- College Park, Coeur d'Alene, Dayton, Guam, Islip, Knoxville, Los Angeles, Newport News, Harlingen, and many more of all sizes around the world
- Limits data recreation
- Reduces data duplication and verification
- Centralizes data retrieval
- Increases business opportunities



Should I Care About GIS?

- FAA AC 150/5300-18B: *General Guidance and Specifications for Submission of Aeronautical Surveys to NGS: Field Data Collection and GIS Standards*
- “Covers the entire spectrum of the FAA’s airport data requirements....Most of this information is source data, acquired by field survey and/or remote sensing methods....[Applies] only to those who purchase the collection of geospatial airport and aeronautical data using AIP or PFC funds, or those who seek to demonstrate compliance by use of the specific method described by this AC.”



Should I Care About GIS? (continued)

- Incremental over the next few years (GA airports around 2015)
- Standards form base map for NextGen
- Airports are responsible for compliance and submitting data to FAA AirportsGIS



AAAE and Cloud Computing

- Cloud computing: Service (not product) of shared resources where information is provided to computers from a central source (Internet)
- AAAE Transportation Security Clearinghouse, Interactive Employee Training and Digicast
- Airport data secured at AAAE as trusted place for highly secured and sensitive airport data
- Airport owns its data



AAAE Enters GIS World

- Many AAAE members became concerned with being able to afford GIS to acquire/submit FAA-required data into AirportsGIS
- Airports also concerned that data would not be given back so airports could use it
- AAAE CANNOT acquire and verify airport data; consultants and airports can
- However, AAAE CAN create web-hosted to store GIS data “Cloud Computing”



SAAMS Overview

- Cloud computing, GIS-based service requiring only **internet connectivity** on airport side
- **No** hardware or data storage requirements at the airport
- Non-customized to keep prices **affordable**
- Platform only; SAAMS does **NOT** provide data collection or professional consulting services



SAAMS Overview (continued)

- Airports can submit orthorectified aerial only
 - Photograph with uniform scale that can be used to measure true distances because it is an accurate representation of the Earth's surface adjusted for topographic relief, lens distortion and camera tilt
- Airport can also submit aerial with required AC 150/5300-18B data if available
 - Aerial with landside/airside asset data, vector lines, elevation contours



SAAMS Overview (continued)

- Designed for **GIS and non-GIS technicians, particularly at smaller airports**, who want to use basic and useful tools, such as redlining, buffering and aircraft layout
- Information captured in SAAMS can be shared quickly and easily with personnel in any department
- Future SAAMS add-on applications, such as lease and work order management, will be useful for GIS technicians and other airport personnel



Examples of Using SAAMS

- Aircraft Layout

AAAE SAAMS - HRL Aircraft Layout search... Greg Mamary September 07, 2011

Aircraft

Aircraft Tools

Select an aircraft.

Search...

Aircraft

- A318
- A319**
- A320-100
- A320-200
- A321-100
- A321-200

Select a tool.

- + Add
- Move
- Rotate
- Delete
- Clear All

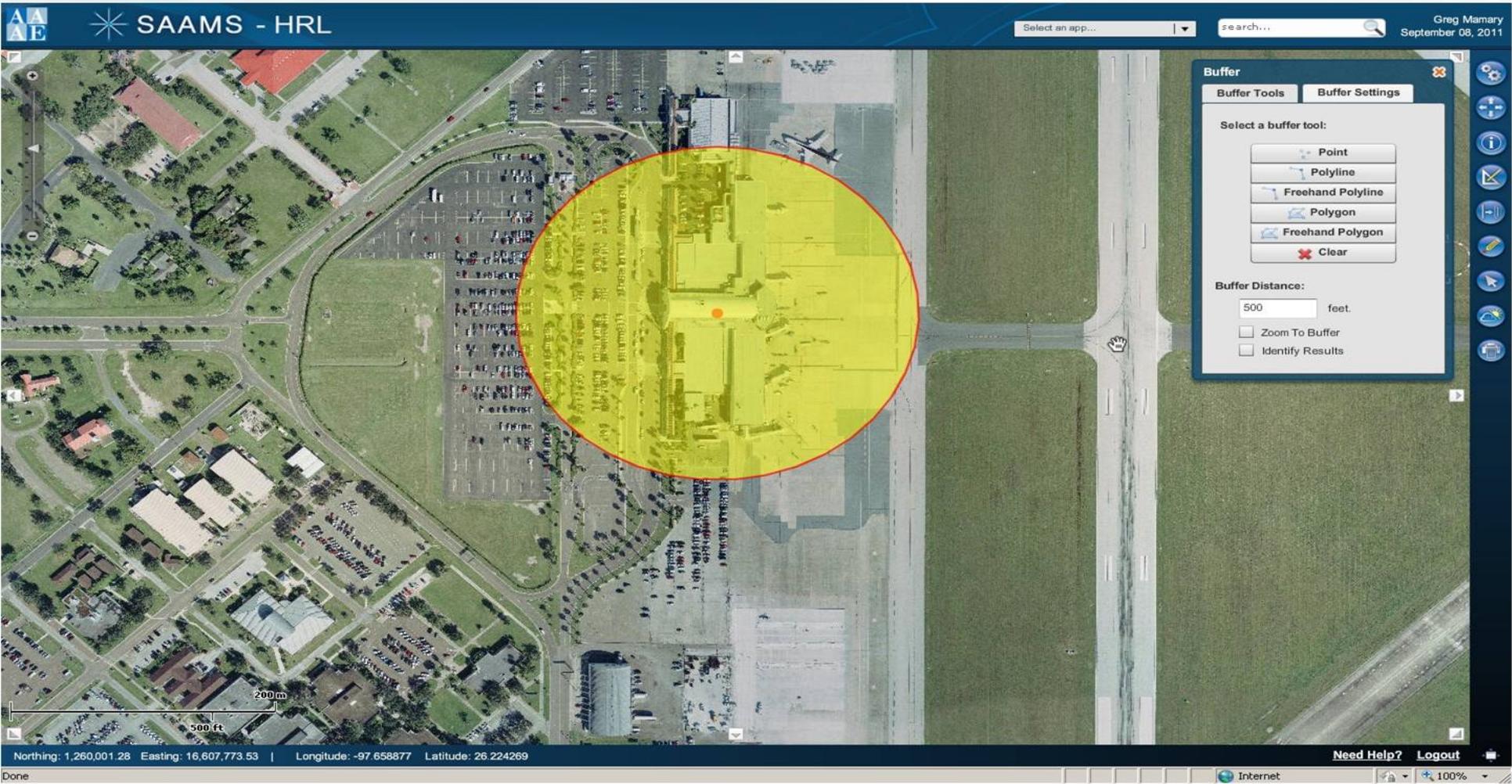
50 ft 20 m

Northing: 1,259,335.34 Easting: 16,607,681.33 Longitude: -97.660910 Latitude: 26.224027

Need Help? Logout

Examples of Using SAAMS

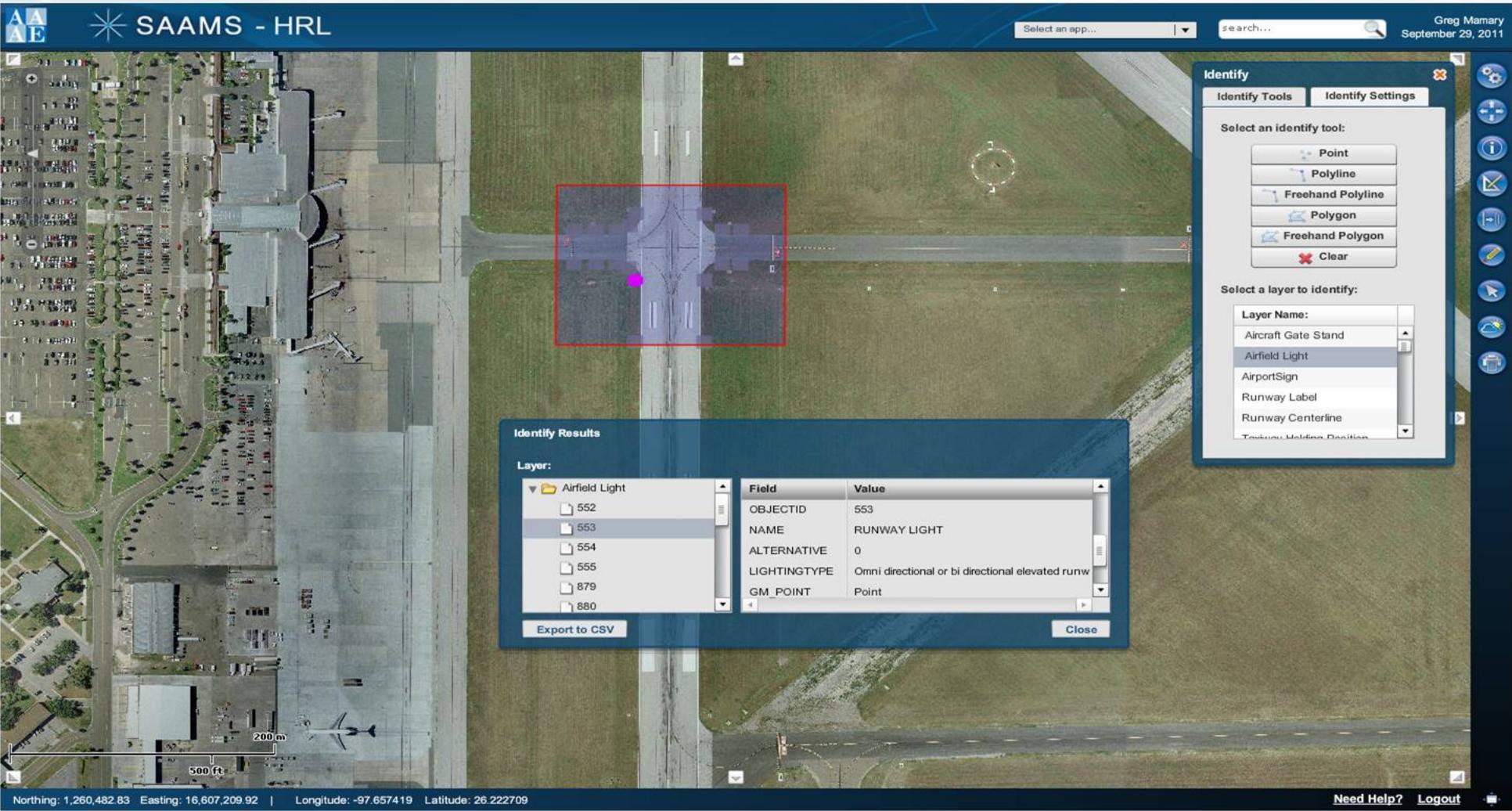
- Create buffer zones



The screenshot displays the SAAMS - HRL web application interface. The main view is an aerial map of an airport terminal area. A yellow circular buffer zone is centered on the terminal building, with a red border. The interface includes a top navigation bar with the AA AE logo, the text "SAAMS - HRL", a dropdown menu for "Select an app...", and a search bar. The user's name "Greg Mamary" and the date "September 08, 2011" are visible in the top right. A "Buffer" panel is open on the right side, showing "Buffer Tools" and "Buffer Settings" tabs. Under "Select a buffer tool:", there are buttons for "Point", "Polyline", "Freehand Polyline", "Polygon", "Freehand Polygon", and "Clear". The "Buffer Distance" is set to "500 feet". There are checkboxes for "Zoom To Buffer" and "Identify Results". The bottom of the interface shows coordinate information: "Northing: 1,260,001.28 Easting: 16,607,773.53 | Longitude: -97.658877 Latitude: 26.224269". A scale bar indicates "200m" and "500 ft". The bottom status bar shows "Done", "Internet", and "100%".

Examples of Using SAAMS

- Identify assets



The screenshot displays the SAAMS - HRL web application interface. At the top, the header includes the AA AE logo, the text 'SAAMS - HRL', a search bar, and the user name 'Greg Mamary' with the date 'September 29, 2011'. The main area shows an aerial view of an airport with a red box highlighting a specific area on the runway. A purple dot is visible within this area. On the right side, there is an 'Identify' panel with two tabs: 'Identify Tools' and 'Identify Settings'. Under 'Identify Tools', there are buttons for 'Point', 'Polyline', 'Freehand Polyline', 'Polygon', 'Freehand Polygon', and 'Clear'. Under 'Identify Settings', there is a 'Layer Name' dropdown menu with options: 'Aircraft Gate Stand', 'Airfield Light', 'AirportSign', 'Runway Label', 'Runway Centerline', and 'Tasking Holder Position'. At the bottom center, there is an 'Identify Results' window showing a list of layers and a table of attributes for the selected layer.

Identify Results

Layer: Airfield Light

Field	Value
OBJECTID	553
NAME	RUNWAY LIGHT
ALTERNATIVE	0
LIGHTINGTYPE	Omni directional or bi directional elevated runw
GM_POINT	Point

Buttons: Export to CSV, Close

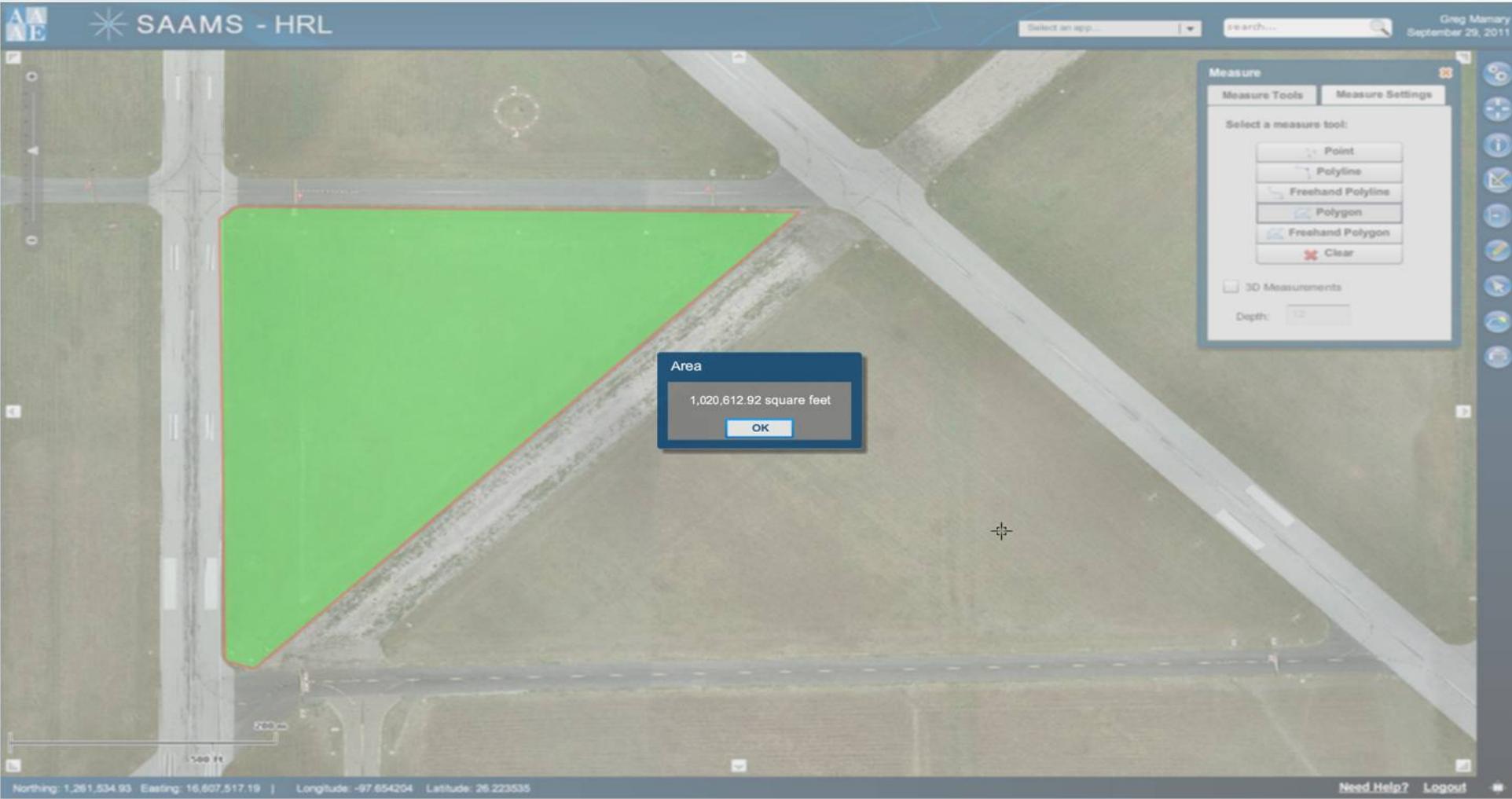
Scale: 200m, 500ft

Coordinates: Northing: 1,260,482.83 | Easting: 16,607,209.92 | Longitude: -97.657419 | Latitude: 26.222709

Need Help? | Logout

Examples of Using SAAMS

- Measure square footage or distances



The screenshot displays the SAAMS - HRL software interface. The main window shows an aerial map with a green polygon overlaid on a road intersection. A tooltip box in the center of the map displays the calculated area: "Area: 1,020,612.92 square feet" with an "OK" button. On the right side, a "Measure" panel is open, showing "Measure Tools" and "Measure Settings" tabs. Under "Measure Tools", the "Polygon" option is selected. Other tools listed include Point, Polyline, Freehand Polyline, Freehand Polygon, and Clear. There is also a checkbox for "3D Measurements" and a "Depth" input field. The top of the interface includes a search bar, a "Select an app..." dropdown, and the user's name "Greg Mamiary" and date "September 29, 2011". The bottom of the interface shows coordinate information: "Northing: 1,261,534.93 | Easting: 16,607,517.19 | Longitude: -97.654204 | Latitude: 26.223535" and a "Need Help? Logout" link.

Examples of Using SAAMS

- Draw exhibits to send to colleagues



SAAMS - HRL

Select an app... search...

Greg Mamary
September 29, 2011

Taxiway Charlie Pavement Replacement

Area: 37,266.62 sq ft
Perimeter: 879.51 ft

Redline

Redline Tools

File Edit

- Select
- Point
- Polyline
- Polygon
- Rectangle
- Text
- Clear

Show Measurements with Graphics

Distance Units:
Feet

Area Units:
Square Feet

100 ft 50 m

35

Northing: 1,260,141.65 Easting: 16,605,707.64 Longitude: -97.658491 Latitude: 26.218583

Need Help? Logout

SAAMS Pricing

- All airports pay same base fee
- Small percentage of annual aircraft movements is added to base fee
 - Differentiates cost between larger and smaller airports
- Includes one named user license; additional licenses are available for a small fee
- Available annually or multi-year with discount
- Fraction of the cost of in-house, customized GIS
- Working on AIP eligibility



Contact

For additional information, please visit

SAAMS.aaae.org

or contact

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