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Surface Analysis and Visualization AGIS Visual Tool

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AGIS Visual Tool

- Where is this data coming from?
- What is the accuracy?
- What are the benefits?
- What are some of the current limitations?
- Engineering Brief #91

What are benefits?

- Getting ahead of the dreaded FAA letter
 - Date of letter and requested date of response was only 10 days



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What are benefits?

- Tool to enter new/proposed obstacles

The image shows a web form titled "New Object Information" with the following fields and values:

- Latitude: 34.21383766161262
- Longitude: -118.38186246761874
- AMS, Elevation: 784.5375248034571
- Obst Type: AERIAL CABLEWAY
- Alt. Height: (empty)
- Runway End Designator: 26
- Obstacle Lit: YES
- Warning Feature Type: ARMED POINT
- Obstacle Source: Airports Field Office
- Status: ABANDONED

 There are "Submit" and "Cancel" buttons at the bottom left. To the right of the form is a satellite image showing an airport tarmac with a yellow marker indicating the location of the obstacle.

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What are benefits?

- Streamlined process for updating obstacles

Object Identifier	Object Type	Object Verification		Latitude	Longitude	Risk Level
02-ADRNOR F0000-15280 (20:1 Slope)	TOWER	<input checked="" type="radio"/> Valid	<input type="radio"/> Not Valid	N 66 48 32.88	W 147 51 33.32	High
02-ADRNOR F0000-18390 (20:1 Slope)	BUILDING	<input checked="" type="radio"/> Valid	<input type="radio"/> Not Valid	N 66 48 32.77	W 147 51 33.60	High
02-ADRNOR F0000-15402 (20:1 Slope)	MAVAID	<input checked="" type="radio"/> Valid	<input type="radio"/> Not Valid	N 66 48 32.22	W 147 51 34.85	Medium
02-ADRNOR F0000-15604 (20:1 Slope)	TREE	<input checked="" type="radio"/> Valid	<input type="radio"/> Not Valid	N 66 48 32.23	W 147 51 35.23	Medium
02-ADRNOR F0000-16327 (20:1 Slope)	VERTICAL STRUCTURE	<input checked="" type="radio"/> Valid	<input type="radio"/> Not Valid	N 66 48 36.70	W 147 51 26.13	Medium
02-ADRNOR F0000-16328 (20:1 Slope)	TREE	<input checked="" type="radio"/> Valid	<input type="radio"/> Not Valid	N 66 48 48.32	W 147 49 27.30	Medium
02-ADRNOR F0000-18828 (20:1 Slope)	TREE	<input checked="" type="radio"/> Valid	<input type="radio"/> Not Valid	N 66 48 56.61	W 147 51 0.79	Low
02-ADRNOR F0000-18829 (20:1 Slope)	TREE	<input checked="" type="radio"/> Valid	<input type="radio"/> Not Valid	N 66 48 56.33	W 147 51 0.59	Low

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What are current limitations?

- Obstruction areas and obstacle buffers



TABLE. OBJECT DENSITY SELECTION CRITERIA. In some cases, strict adherence to the obstacle selection criteria listed above might result in congestion or inadequate obstruction representation. To maximize these situations, the following guidelines must be followed in obstacle selection:

- If obstacles that are required in the primary area or first 10,000 feet of an approach area are located within 100 feet of each other, the lower obstacle may be omitted.
- If obstacles that are required outside the primary or first 10,000 of an approach area are located within 500 feet of each other, the lower obstacle may be omitted. *Notes:* Required primary or approach obstacles must not be omitted because of the close proximity of higher obstacles outside of the primary or approach areas.
- When a required obstacle is omitted because of congestion, a replacement obstacle (obstacles) must be selected, if possible, that meet the spacing criteria.
- Occasionally, additional obstruction information may be useful in representing certain obstructing conditions. Where a rigorous selection criteria is not practical, information useful in obstruction clearing activities should be considered in the selection.

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What are current limitations?

- Reporting removed or mitigated obstacles
 - Mitigation Summary provides an overview of all surface penetrations to update
 - What about obstacles that are not surface penetrations but may be in the future?
 - EB #91 has submit existing data AGIS projects
 - Not verified and may cause duplicate records



What are current limitations?

- Still in Beta phase
- Should include options to see all published obstacles to better determine future risk

20:1 penetrations

▲ Red triangles represent high risk penetrations verified to be more than 11 feet above the defined 20:1 surface. For these penetrations the FAA must take immediate action to restrict the Instrument Approach Procedure (IAP) visibility to at least 1 statute mile (SM) and, if the object is not lit, restrict night operations.

■ Yellow squares represent medium risk surface penetrations verified to be greater than 3 feet and up to and including 11 feet above the defined 20:1 surface. FAA is not required to take immediate action to restrict IAPs for these penetrations.

◆ Green diamonds represent low risk surface penetrations verified to be 3 feet or less above the defined 20:1 surface. FAA is not required to take immediate action to restrict IAPs for these penetrations.



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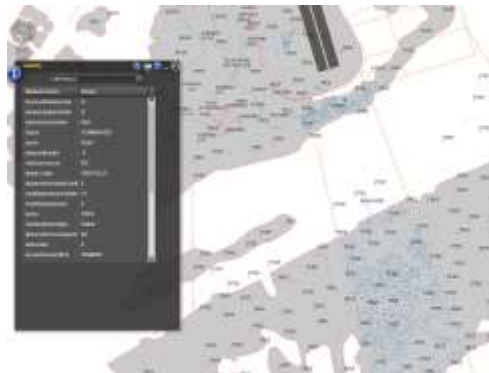
- Establishes requirements on management of vegetation on or around an airport
 - Specifically discusses removal, topping and how to submit supporting data back to the FAA
 - Recommends an existing AGIS data project

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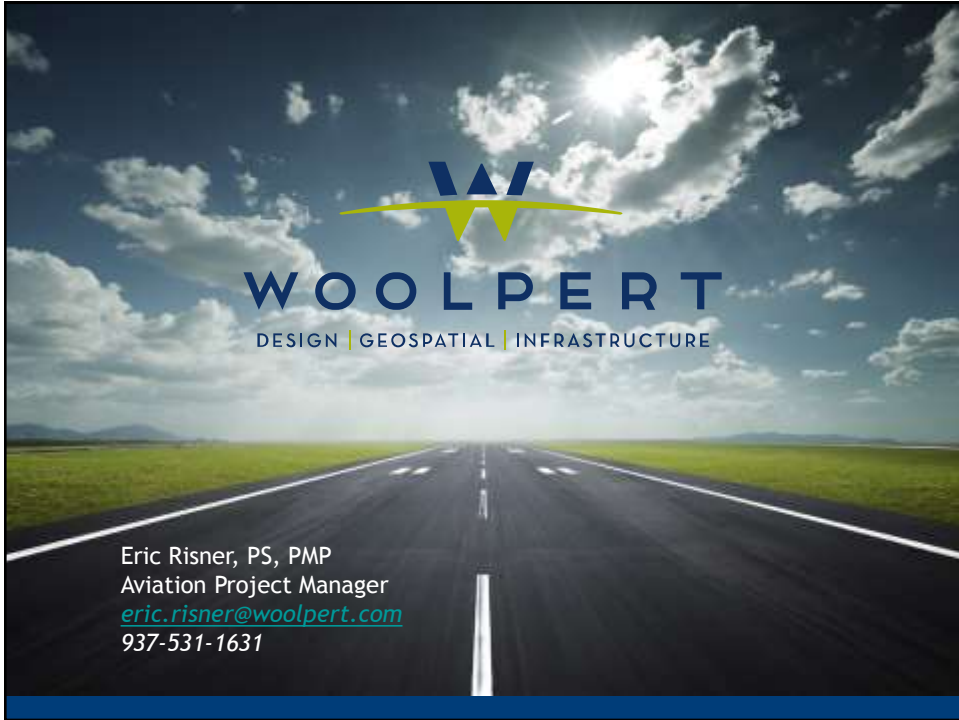
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- Should be discussed beforehand the extent of updates and best approach



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The image is a business card for Eric Risner, PS, PMP, Aviation Project Manager at Woolpert. The background is a photograph of a long, straight asphalt road stretching into the distance under a bright, cloudy sky. The Woolpert logo, a stylized 'W' with a yellow and blue color scheme, is centered at the top. Below the logo, the company name 'WOOLPERT' is written in large, blue, sans-serif capital letters. Underneath the company name, the services 'DESIGN | GEOSPATIAL | INFRASTRUCTURE' are listed in smaller, blue, sans-serif capital letters. In the bottom left corner, the contact information for Eric Risner is provided in white text: 'Eric Risner, PS, PMP', 'Aviation Project Manager', the email address 'eric.risner@woolpert.com', and the phone number '937-531-1631'. A solid blue horizontal bar runs across the bottom of the card.

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