Surface Analysis and Visualization
AGIS Visual Tool

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The 2015 **Airports** Conference

March 2–4, 2015 - The Hershey Lodge in Hershey, Pennsylvania

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

Surface Analysis and
Visualization

Where is this data coming from?

- National Airspace Systems Resources (NASR)
  - 56-day cycle
  - Analysis through SAV only as good as this data
  - May not reflect recent changes
    - Time delays between finishing a project and NASR update through AGIS

Surface Analysis and Visualization

Where is this data coming from?

- Airports GIS System
- Existing obstacle databases
  - Digital Obstacle File (DOF)
  - OE/AAA (Merging of databases)

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What is the accuracy of this data?

- Best answer is it varies
- AC 150/5300-18B specifies accuracy of features
- FAA Order 8260.19F specifies obstacle accuracy

HORIZONTAL	VERTICAL
Code Tolerance	Code Tolerance
1 ~20 ft (6 m)	A ~3 ft (1 m)
2 ~50 ft (15 m)	B ~10 ft (3 m)
3 ~100 ft (30 m)	C ~20 ft (6 m)
4 ~250 ft (75 m)	D ~50 ft (15 m)
5 ~500 ft (150 m)	E ~125 ft (38 m)
6 ~1,000 ft (300 m)	F ~250 ft (75 m)
7 ~1/2 NM (900 m)	G ~500 ft (150 m)
8 ~1 NM (1800 m)	H ~1,000 ft (300 m)
9 Unknown	I Unknown

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What is the accuracy of this data?

Surface Analysis and Visualization

What are benefits?

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

What are benefits?

- Tool to enter new/proposed obstacles

What are benefits?

- Streamlined process for updating obstacles

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What are current limitations?

- Obstruction areas and obstacle buffers

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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

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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.

Surface Analysis and
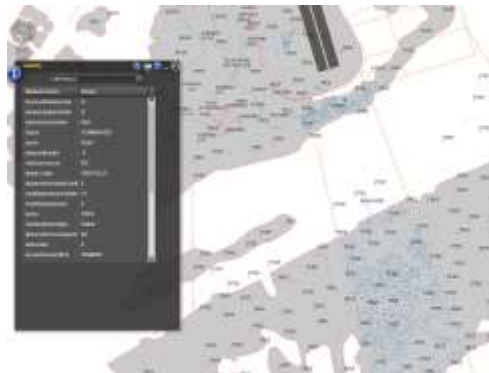Visualization

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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
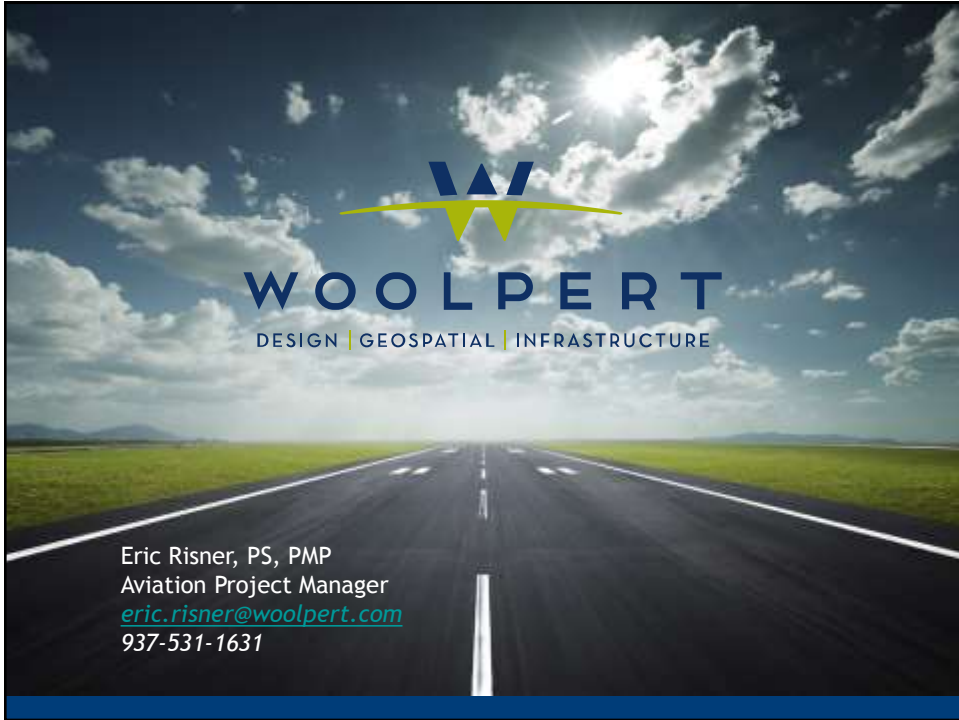 - Recommends an existing AGIS data project

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

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