20:1 Issue Overview

- On November 15, 2013, a joint FAA memorandum was issued to provide Interim Policy Guidance for the mitigation of penetrations to the 20:1 Visual Area Surface.
- The interim policy guidance became effective on January 6, 2014 and contains a risk-based approach with varying action timeframes relative to the amount of penetration to the 20:1 surface.
- In November 2013, the ARP Regional Division Managers sent an email out to all of the NPIAS airports to emphasize their responsibility to regularly review and maintain clearance to all their approach and departure surfaces (beyond just the 20:1 surface).
- In the notice to the airport owners/ sponsors, the FAA highly recommends Airport Sponsors take a proactive approach by reviewing all approach surfaces in advance of any flight check schedule to ensure they are clear.
20:1 Issue Overview

- The FAA has now received comments from RTCA and we are revising the Interim Policy on 20:1
- Preferred method for the airport sponsor to report updated tree heights through AGIS is highlighted in Engineering Brief #91, “Management of Vegetation in the Airport Environment”
- In order to promote transparency to the Airport Sponsor and other stakeholders, AAS worked with our Technical Support Contractor to develop a visual tool within our Airports GIS platform to render a 3-dimensional view of the 20:1 visual area surface showing all FAA known obstacle penetrations
- The 20:1 tool has recently been released nationwide! External webinars will be scheduled soon.
- The tool will be expanded in future phases to show other FAA approach/ departure surfaces

But… it’s not all about the 20:1 surface!

- Although penetrations to the 20:1 surface result in the most severe impacts, we need to collectively protect all approach and departure surfaces to the extent practicable
- The FAA Flight Procedures Team (FPT) will be ensuring public safety by applying restrictions to approaches
- The Airport Sponsor and FAA Airports Organization (ARP) need to work together to preserve the utility, capacity and efficiency of each runway, wherever practicable
- Identifying obstacles and actions to clear the surfaces need to begin within our normal airport planning initiatives - well before you receive a notice from the FPT
- Discussion about clearing surfaces needs to occur regularly at FAA ARP and Airport Sponsor meetings
- The Airport Sponsor’s proposed plan of action for obstacles needs to be reviewed/ updated regularly by the Sponsor and communicated to the FAA
How can the FAA help?

- We will continue to enhance tools in AGIS to visually show the surfaces so there should be no surprises
- ARP Regional and Airports District Offices (ADOs) can help with all the planning, environmental, programming and engineering aspects
- Get to know the appropriate personnel within your Flight Procedures Team (FPT)
- FAA ADOs will review requests for funding on a case-by-case basis for eligible and justified projects similar to all other ACIP projects
- Ensure you are collecting all survey data required under FAA AC 150/5300-16, 17 and 18 for your AIP projects. New survey data will help the FAA replace outdated info in our databases.

So, what is the SAV Tool?

- Besides being known as the “20:1 tool”!
- Provides airport sponsors the capability to:
  - Define surfaces for verification and evaluation
  - View surfaces and obstacles in 3D environment
  - Identify the amount of object penetration
  - Assess risk associated with object penetration
  - Identify types of mitigation
  - Build Compliance Plan
### Phase 2 Release Enhancements

- **Enable automation of reporting to Eastern Service Center.**
  - Electronic submittal of verification report and compliance plan information to FPT
  - Automation rollout to follow in FY15 at remaining Service Centers.
- **Ability to export data from all tabs into csv files**
- **Removal of Aircraft Approach Categories C and D**
- **Ability to upload and visualize Terminal Instrument Procedures (TERPS) 20:1 penetrations**

### Phase 2 Release Enhancements

- **New Verification Tab**
- **Ability to mark obstructions as valid/invalid**
- **Acknowledgement of FPT’s Notification Letter of Potential Surface Penetrations automatically sets/resets the verification due dates**
- **Ability to apply same comment(s) to multiple like obstructions on Verification and Compliance Tabs**
SAV Tool

**The SAV Tool does not evaluate for:**
- Offset approach conditions
- Excessive Decision Altitude
- Approaches with Visual Descent points outside 10,000 feet (1.654 NM)

Airport sponsors or owners will receive specific guidance from the FAA Flight Procedures Team (FPT) on objects requiring mitigation for any of the situations listed above.

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SAV Tool

**When submitting updates within the SAV Tool please remember:**
- Changes submitted through the application do not automatically change flight procedures such as approach minimums.
- Submitting an update to an object only initiates the FAA process to review the procedures affected by the change.
Airports GIS Login
https://airports-gis.faa.gov/public
SAV Tool
Airport Selection Screen

This limited-release, limited-scale “beta test” version of the Surface Analysis and Visualization tool is now available for airports nationwide to process FAA object penetration data. Airports within the Eastern Service Area have full automation capabilities as the pilot service area. Airports within the Central and Western Service Areas have limited automation capabilities to send their data to the FAA. Once you complete the required analysis or plan, airports in Central and Western Service areas will need to download the CSV file provided on the left hand navigation pane and send them via email to their respective Airports District or Regional Office as well as the Service Area Flight Procedures team for action. The user’s guides, online help, and quick reference material included with the tool reflect the full functionality of the tool and do not cover this beta release functionality. For information and guidance about using this beta release, please consult the “Instructions for Beta-Test Users” document delivered with this application by clicking here. If you have any questions or problems, please contact the Airports GIS Help Desk for assistance.

The Help Desk is available 24 hours a day by submitting an online request here.
Live Help Desk Support is available from 8:00 A.M. to 5:00 P.M. Monday - Friday (except Federal Holidays) at (844) 357-2447.

Airport Tab
Airport Tab

FPT Toolbox

Airport Tab

FPT Toolbox
Airport Tab
FPT Toolbox

Visualization Tab
Visualization Tab
Visualization Tab

Verification Tab
Verification Tab
## Penetration Report Tab

![Penetration Report Tab](image1)

## Compliance Plan Tab

![Compliance Plan Tab](image2)
Compliance Plan Tab

Surface Analysis and Visualization - Compliance Plan

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Compliance Plan Tab
Compliance Plan Tab

![Compliance Plan Tab Image]

Compliance Plan Tab

![Compliance Plan Tab Image]
Mitigation Summary Tab
Notes Tab

Questions?

SAV Tool – Point of Contact
Andrew Goldsmith
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202-267-6549

Airports GIS Help Desk
8AM-5PM ET Mon-Fri at 1-844-357-2447
Other AGIS tool slides

FY 2015 Deliverables

• **Airports GIS Tools**
  – Surface Analysis & Visualization (SAV) Tool
  – Modification of Standards (MOS) Tool
  – Electronic Airport Layout Plan (eALP) Tool
  – NAV Lean 5010 Airport Data Update Tool

• **Airports GIS Commissioning**
  – National Roll Out September 30
1st Deliverable: SAV Tool (1.0)

- 20:1 Surface Visualization
- Obstacles Data Visualization and Validation
- Obstructions Risk Identification and Visualization
- Measurement of Penetrations
- Penetrations Report
- Mitigation Coordination with Full Automation
  - Eastern Service Area
  - Remaining Areas

2nd Deliverable: MOS Tool (1.0)

- Web-enabled Modification of Standards (MOS) Form
- Digital Submission for Review
- Web-enabled Coordination of Approval Process
- Digital Signature
3rd Deliverable: eALP Tool (1.0)

- Web-enabled Aerial Imagery and Map Overlay
- Measurement Tools (e.g., Distance, Circumference, Area)
- Attribute Data Viewing
- Markup and Exhibit Generation
- Web-enabled Collaboration
- ALP Change Coordination
- ALP Drawing Set Generation and Viewing

4th Deliverable: Data Mgm’t (1.0)

- User Interface for Airport Authoritative Data Source (a.k.a., “5010 Data Update”)
- Web-enabled Airport Data Updates
- Digital Submission for Review
- Web-enabled Coordination of QC/QA
- Reducing Multiple Airport Data Entry Mechanisms to a Single Entry Point (Improving Data Integrity)
Commissioning

- Transition from Development to Operation
- Outreach to Regions-ADOs to Validate and Realign (as necessary) to Meet Intended Objectives
- Business Process Improvement Change Management
- Testing & Training Program Enhancements
- Metrics & Key Performance Indicators (KPI)s to Manage and Fine-Tune Operation
- Quality Assurance (QA) oversight

Beyond FY 2015…

- SAV 2.0+ (more approach/ departure surfaces)
- eALP 2.0+ (more customization & features)
- MOS 3.0 (with Documentum Content Management)
- Airports Safety Dashboard (Rwy Incursion Mitigation)
- Airport Design Tool
- Full Cloud Content (one-stop information shop)
- Property Map Exhibit A Tool (Order 5190.2)
- Pavement Management Tool
- Project Management Tool
- Environmental Management Tool