Headquarters Air Mobility Command

AMC’s Partnerships For Creating IGI&S Enabled Airfield Suitability Diagrams

Rick Marshall, Contractor
AMC/A7OO

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AMC IGI&S OVERVIEW

The Installation Geospatial Information and Services (IGI&S) Program Brings Enterprise Architecture and Data Standards to Air Force Geographic Information Systems (GIS)

• This Architecture Provides Distribution of Functional Community GeoSpatial Data Across the AF Global Information Grid (GIG)
• Data Standards Support Interoperability and Integration
• The Air Force Portal Provides A Common Distribution Platform
• Supports Visual Integration of Functional Community Data such as GO81, AAFIF, GDSS-II, GATES Using Read-Only Permissions

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Current AMC Geointegration Efforts: Airfield Diagrams

**AMC/A3:**
- Giant Report Contains Tabular/Text Data
- Airfield Diagram May Be FLIP, AFCESA, or Not Available

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Current AMC Geointegration Efforts: Airfield Diagrams

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Current AMC GeIntegration Efforts: Airfield Diagrams

- AMC/A3:
  - Web-Based Airfield Diagram Overlays
  - Linked From Giant Report
  - Overlay On The IGI&S Service
  - Viewed From Within The Air Force Portal

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Current AMC Geointegration Efforts: Airfield Diagrams

AMC/A3:
- PDF Airfield Diagrams Linked From Giant Report
- Both Web-Based Airfield Diagram Overlays and PDF Airfield Diagrams Are Scalable For Mission Planning and Aircrew Use

Tenerife Sur, Canary Islands

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Future IGI&S Integration for AMC

- IGI&S Supports Many AMC Cross-Functional Business Processes
- Capabilities Can be Developed At Two Different Levels:
  - Add Existing AMC Data to IGI&S Services Producing A New Layer That Overlays On The Existing IGI&S Service. (Adding GO-81, GDSS II, GATES layers).
  - Add IGI&S Visualization to Existing AMC Business Process (Add Mapping Component to GO-81, GDSS II, Giant Report, GATES, Airfield Obstructions/Weight Bearing Capacity Waiver Process)
- Geography Is The Common Thread Running Through AMC Mobility, C2, and Mission Support Systems Data

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IGI&S Capabilities for AMC/A3

Current Capabilities:

• A3A: Airfield Diagrams
  - PDF Airfield Diagrams Attached To The AMC GIANT Report
  - Airfield Diagram Overlay on IGI&S Service
  - 3-D Airfield Diagrams for Google Earth

• A3T: Visualization of Terminal Procedures (TERPS) Data Including:
  - Airfield Obstacles
  - TERPS Wagon Wheel
  - NGA’s World-Wide Obstacle Data
Future Possibilities

- A3A: Airfield Weight Bearing Capacity Waiver Tool
- A3A: 3-D Airfield Diagrams (Garrison and Expeditionary)
- A3B: Feature Extraction For Commercial Carrier Airfields
- A3D: Visualizing the Installation Basing Space
- A3M: CRW Support
- A3R: Developing Future C2/Mobility Systems Visualization Standards and Capabilities
- A3X: CAT Integrated Visualization Tools
  - Emergency Response, Ops, MX, Trans, AFIMS Integrated Viewer
IGI&S for A4

- Current Capabilities:
  - A4P: Parking Spot Data
    - Airfield Diagram Overlay on IGI&S Service
      - Currently at Charleston, McConnell, and Dover
IGI&S for A4

Future Possibilities

- A4M: AGE Tracking
- A4R: Vehicle Tracking
- A4T: Flightline Ops Viewer
- A4X: Site Survey Visualization
Future Possibilities

• XON: Integrating Mobility and C2 Systems Into Mission Sequence of Events Layer
• XOO: Visualizing the Basing Space for Mission and Flight Planning
  - WHMO Planning
• XOP: Several Ties Into Global Reach Laydown Planning and Execution
  - IGI&S On the Unclassified Side
  - GeoReach on the Secret Side
Future: IGI&S for A3/TACC: 3-D Installation Viewer

AMC GeoBase Installation Common Installation Picture (CIP) Layered on Google Earth or ArcGIS Explorer

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AMC IGI&S Summary

- The IGI&S Program Brings Interoperability and Visualization to Several of AMC’s Mobility and C2 Systems without Manipulating Any Data
- IGI&S Brings Visualization and Integration of Tabular and Text Data
- IGI&S Can Integrate These Systems/Capabilities Using Common Geography

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