

Headquarters Air Mobility Command



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

**Rick Marshall, Contractor
AMC/A700**

6 Aug 08

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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

GDSS Giant Report | KCHS - CHARLESTON AFB INTL

Unclassified Corporate Database

Basic Information

Name: CHARLESTON AFB INTL ICAO: KCHS Alternate ICAO:

Alternate Names: WAC INNR: 0409-00039 Category ID:

Airfield Type: JOINT (J)

Latitude: 32 53 9N Longitude: 080 02 4W Elevation: 45

Country: SOUTH CAROLINA Country Code: 45

STIF information exists for: [KCHS-Airfield Survey] [KCHS-Airfield Diagram] [KCHS-General Info]

Other Links: [NOTAMS]

Survey Date: 19-SEP-1978 Review By: KLINGLER Review Date: 25-JUN-2007

Suitability Codes

Codes: ABCDEFGLOZ All Suitability Codes

Explanations:

A	SUITABLE C-141B
B	SUITABLE C-5
C	SUITABLE C-130
D	SUITABLE C-17
E	SUITABLE KC-10
F	SUITABLE KC-135
G	SUITABLE C-9
L	SUITABLE C-21
Q	APPROVAL/ADVISORY REQ'D - SEE GDSS FOR OBSTRUCTIONS AND RESTRICTIONS INFO
Z	SEE STIF FOR MAJCOM SUPPLEMENTAL INFORMATION

Note: Some suitability codes (H, I, J, K, and M) may apply to several aircraft. These codes apply to a particular aircraft only when combined with a 'suitable' code for that aircraft. Likewise, they do not apply when combined with an 'unsuitable' code for that aircraft.

ASR Remarks: MSC:

Geoloc: DKFX Area ID: 018 FAA: CHS

Runway Information

Runways

ID	Pri	Len	LDA	Wid	Surface	Condition	Raw	WBC	PCN	S	T	ST	TT	SBT	TDT	TRT
Rwy: 03			7004		7004											
Recip: 21			7004	150	ASP	GOOD	PCN 72FAWT	72FAWT	XXX	111	175	345	593	840	585	
Rwy: 15			9001		9001											
Recip: 33			9001	200	CON	GOOD	PCN 51RBWT	51RBWT	XXX	111	175	345	527	840	589	

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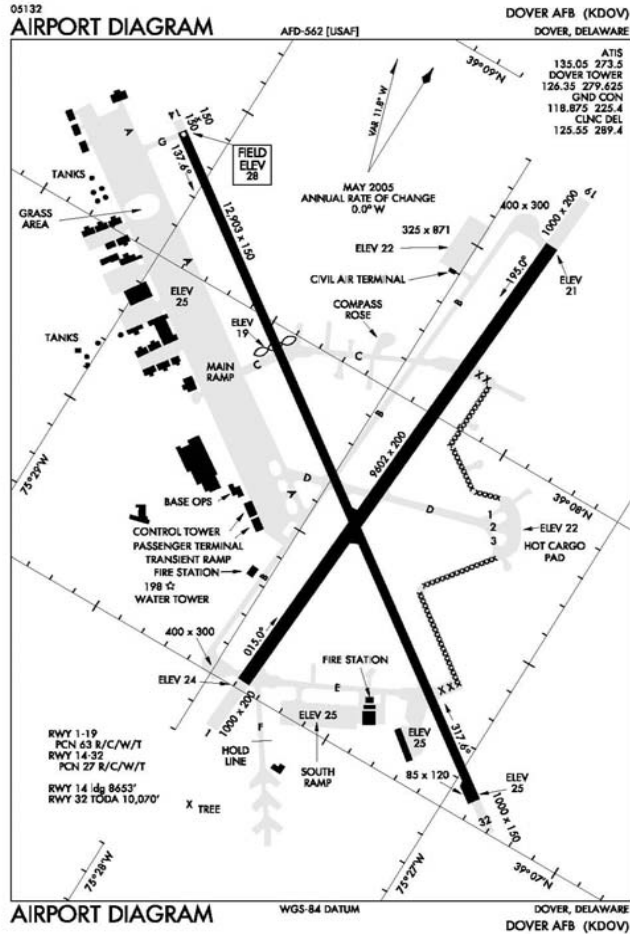


Current AMC GeIntegration Efforts: Airfield Diagrams

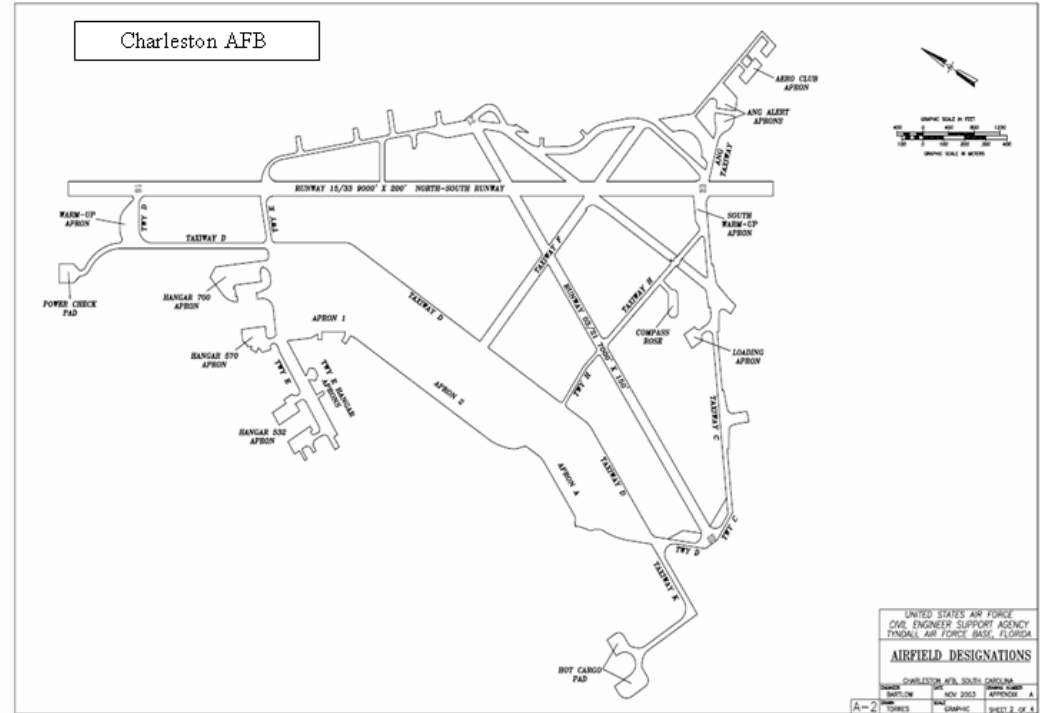


FLIP

AFCESA



Effective 02 AUG 2007 - 30 AUG 2007



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Current AMC GeoIntegration 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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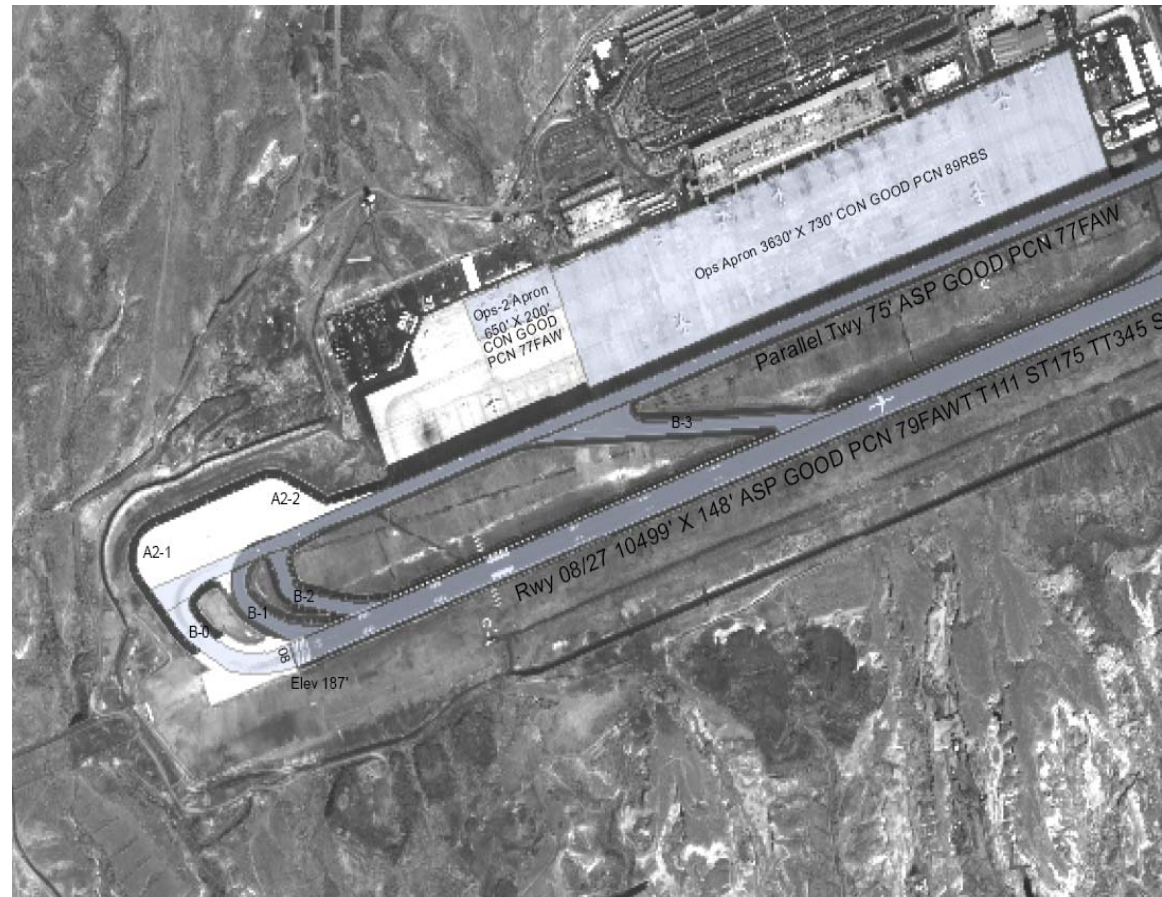


Current AMC Geointegration Efforts: Airfield Diagrams



■ 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

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IGI&S for AMC/A3



■ 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**

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IGI&S for A4



■ Current Capabilities:

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

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IGI&S for A4



■ Future Possibilities

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

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IGI&S for A4



■ 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

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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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AMC Operations Division Contacts



- Lt Col Mark Ruse, AMC/A7O, 229-0740
- Mr. Jim Colombo, AMC/A7OO, AMC GeoIntegration Officer, 229-8583
- Mr. Rick Marshall, AMC/A7OO, 229-0877, rick.marshall.ctr@scott.af.mil

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