AAS-100 Guidance Document Updates

Presented to: The AAS National Consultants Workshop

By: Michael A.P. Meyers, P.E.

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Federal Aviation Administration

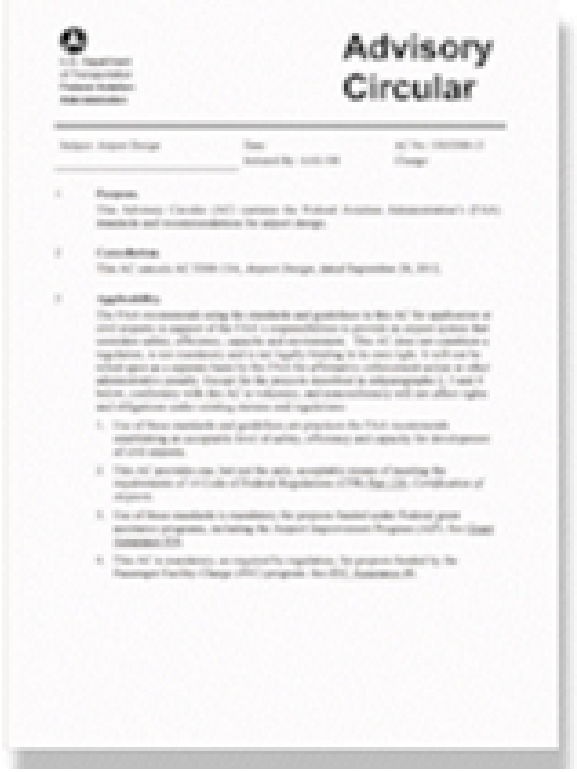
About the Presenter

Manager, Airports Engineering Division
Office of Airports Safety and Standards
Federal Aviation Administration

Goal: *To give an overview of how FAA guidance is created or updated, recent accomplishments and plans to address challenges ahead.*

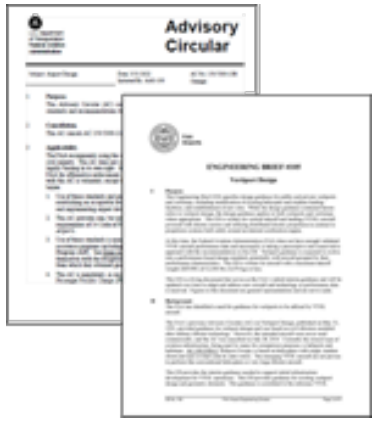
Agenda

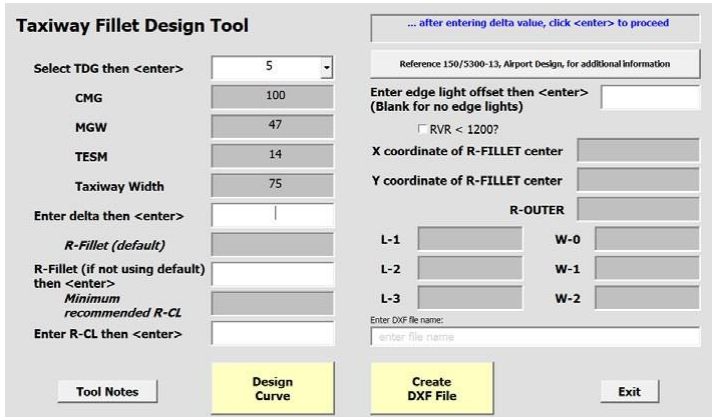
- **ACs and EBs**
  - –Recently published
  - –In the works
  - –Proposed



Types of Guidance and Tools

- Advisory Circulars
- Engineering Briefs
- FAA Orders (Inward Facing)
- Engineering Tools and Videos





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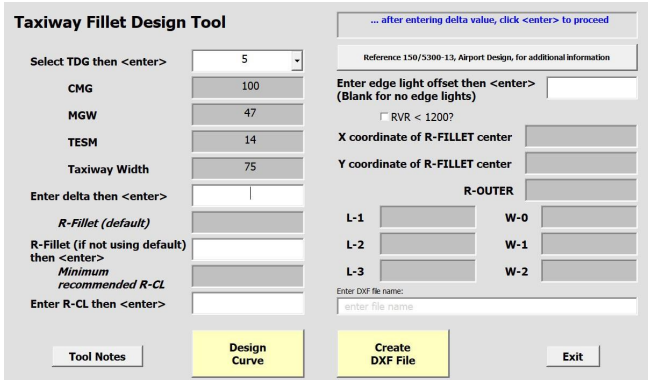
Airport Design Tools and Videos

Tools:

- Aircraft Characteristics Database ADG and TDG Classification Tool
- Acute Angle Exit Tool
- Taxiway Fillet Design Tool
- Runway Exit Design Interactive Model (REDIM)



Technical Videos:

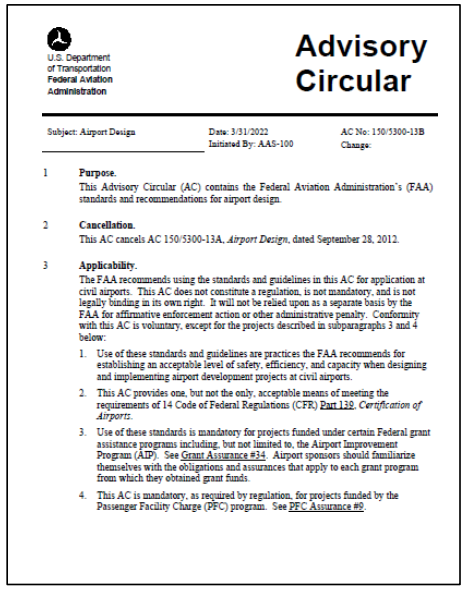
- Taxiway Design Groups Basic Taxiway
- Design Taxiway Fillet
- Design End-Around Taxiways
- Runway Incursion Mitigation & Prevention High-Speed Exit Taxiways

https://www.faa.gov/airports/engineering/airport_design

When, How, What, Triggers Guidance Updates

- **Changes in aircraft performance/characteristics**
- **Progress in technology (AI/Machine Learning)**
- **Tech Center research**
- **Alignment with ICAO (Sometimes)**
- **Feedback received from:**
  - Part 139 ACSIs & State Agencies
  - Region/ADOs
  - Industry (MOS, AC comments, etc.)

- **Can be addressed in:**
  - Errata (corrections)
  - Change Set (i.e., change 1), or
  - Engineering Brief



U.S. Department of Transportation
Federal Aviation Administration

Advisory Circular

Subject: Airport Design | Date: 3/31/2022 | Initiated By: AAS-100 | AC No: 150/5300-13B | Change:

1 **Purpose.**
This Advisory Circular (AC) contains the Federal Aviation Administration's (FAA) standards and recommendations for airport design.

2 **Cancellation.**
This AC cancels AC 150/5300-13A, *Airport Design*, dated September 28, 2012.

3 **Applicability.**
The FAA recommends using the standards and guidelines in this AC for application at civil airports. This AC does not constitute a regulation, is not mandatory, and is not legally binding in its own right. It will not be relied upon as a separate basis by the FAA for affirmative enforcement action or other administrative penalty. Conformity with this AC is voluntary, except for the projects described in subparagraphs 3 and 4 below:

1. Use of these standards and guidelines are practices the FAA recommends for establishing an acceptable level of safety, efficiency, and capacity when designing and implementing airport development projects at civil airports.
2. This AC provides one, but not the only, acceptable means of meeting the requirements of 14 Code of Federal Regulations (CFR) Part 139, *Certification of Airports*.
3. Use of these standards is mandatory for projects funded under certain Federal grant assistance programs including, but not limited to, the Airport Improvement Program (AIP). See Grant Assurance #34. Airport sponsors should familiarize themselves with the obligations and assurances that apply to each grant program from which they obtained grant funds.
4. This AC is mandatory, as required by regulation, for projects funded by the Passenger Facility Charge (PFC) program. See PFC Assurance #9.

Recently Published

Recently Published AAS-100 Guidance

Type/Number	Title	Publication Date
AC 150/5300-20	Submission of On-Airport Proposals for Aeronautical Study	April 2023
EB 107	Aeronautical Study of 5G C-Band Antennas	April 2023
EB 94A	Accommodating the Boeing B-777 Folding Wingtip Airplane onto Airports	February 2024
AC 150/5300-13B	Airport Design, Change 1	August 2024

Under Draft

AAS-100 Guidance Under Draft

Type/Number	Title	Status
AC 150/5340-18H	Standards for Airport Sign Systems, Change 2	Industry Comments due 8/26/24
AC 150/5345-42K	Specification for Airport Light Bases, Transformer Housings, Junction Boxes, and Accessories	Near Publication
AC 150/5345-44L	Specification for Runway and Taxiway Signs	Near Publication
AC 150/5345-46F	Specification for Runway, Taxiway, Heliport, and Vertiport Light Fixtures	Near Publication
150/5370-10J	Standards for Specifying Construction of Airports	Recently Released for Internal Review

AAS-100 Guidance Under Draft (con't)

Type/Number	Title	Status
EB 108	Aeronautical Surveys of Heliports	Under Internal Review
EB 105A	Vertiport Design	Recently Released for Internal Review

Future Planned Publications/Challenges to Address

AAS-100 Planned Future Guidance

Type/Number	Title /Topic	Status
AC 150/5340-1N	Standards for Airport Markings	TBD
AC 150/5370-2H	Operational Safety on Airports During Construction	TBD
AC 150/5320-6	Airport Pavement Design and Evaluation	TBD
AC 150/5220-26	Airport Ground Vehicle Automatic Dependent Surveillance - Broadcast (ADS-B) Out Squitter Equipment (VMATs)	TBD
AC 150/5345-27F	FAA Specification for Wind Cone Assemblies	TBD
AC 150/XXXX-X	AAM Infrastructure Design	TBD
TBD	Guidance on Alternative Project Delivery Methods (Section 723)	TBD
TBD	Autonomous Vehicles and Operation (Section 766)	TBD

AAS-100 Planned Future Guidance (con't)

Type/Number	Title /Topic	Status
TBD	Other Emerging Entrants (UAS, Commercial Space, etc.)	TBD
TBD	Resiliency Practices (Section 1014)	TBD
AC 150/5370-2H	Sustainability Practices (Section 1014)	TBD
FAA Orders 5200.8 and 5200.9	Runway Safety Area Determination Guidance (EMAS, Declared Distances, etc.)	TBD

Efforts Regarding ICAO Coordination

- Recent modifications to 150/5300-13, *Airport Design* were to align with ICAO standards
- Pavement Condition Reporting
  - AC 150/5335-5D, ***Standardized Method of Reporting Airport Pavement Strength – PCR*** (Conversion of ACN/PCN to ACR/PCR)
- International Civil Aviation Organization (ICAO) Universal Oversight and Audit Program (USOAP) Audit

Questions?

Michael A.P. Meyers, P.E.

michael.a.meyers@faa.gov

Manager, Airports Engineering Division, AAS-100

+1.202.267.8785