Advisory Circular Updates
Airport Planning and Environmental Division (APP-400)

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Advisory Circular Update Context

- As of 2012, 118 Advisory Circulars:
  - AAS: 103
  - APP: 12
  - ACO: 3

- Current average age of all Office of Airports (ARP) ACs is six years
  - AAS – approx. 4 years
  - APP – approx. 19 years
  - ACO – approx. 4 years

- Goal to maintain average age of ACs at five years or less

- Updates to most of the major advisory circulars are underway or recently completed, including the recent update to 150/5300-13A, Airport Design, in September 2012
APP-400 Advisory Circular Updates – Efforts Underway

• 150/5020-1 Noise Control and Compatibility Planning for Airports
• 150/5000-9A Guidelines for the Sound Insulation of Residences Exposed to Aircraft Operations
• 150/5190-4A Airport Land Use Compatibility (A Model Zoning Ordinance to Limit the Height of Objects Around Airports)
• 150/5050-4 Planning Public Involvement in Airport Studies (Citizen Participation in Airport Planning)
• 150/5070-6B Airport Master Plans
• 150/5100-17 Land Acquisition and Relocation Assistance for Airport Improvement Program Assisted Projects
• 150/5360-13 Planning and Design Guidelines for Airport Terminal Facilities
• 150/5360-9 Planning and Design of Airport Terminal Facilities at Non-Hub Locations
• 150/5060-5 Airport Capacity and Delay
• 150/5070-7 The Airport System Planning Process
Other Guidance Under Development

- Energy Efficiency of Airport Power Sources
- Technical Guidance for Evaluating Selected Solar Technologies on Airports
- Guidelines for Oil and Gas Development on Federally Obligated Airports
AC 150/5050-4: Planning Public Involvement in Airport Studies (Citizen Participation in Airport Planning)

- This AC is one of the oldest (1975), so this effort is meant to bring the AC in line with current best practices
- Scope:
  - the need for public involvement,
  - planning for public participation,
  - public outreach methods, tools and practices, and
  - assessing the effectiveness of a public participation program, tracking documentation and close-out.
- The AC will provide an overview of public involvement techniques for airport planning, Part 150, and Part 161 studies and environmental reviews under NEPA.

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Land Acquisition and Relocation Assistance for AIP-Assisted Projects

- This AC was last updated in 2005.
- Scope: The update will standardize Uniform Relocation Act (49 CFR Part 24) compliance and documentation guidance for FAA-assisted airport projects and streamline sponsor land project certification to FAA field offices.
- Schedule and industry outreach:
  - The draft AC will be shared with industry groups for review and comment via webinars/meetings this winter.
  - The updated AC will be issued in mid-2014.

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Advisory Circular 150/5070-6B, Airport Master Plans

- Last published on May 1, 2007 (Change 1)
- Revisions to the AC are necessary to address a number of factors that have shaped the airport master planning process in the intervening period, including, but not limited to:
  - changes in the airline industry such as aircraft fleet, airline market shifts (hub concentration), and impacts of airline consolidation;
  - increased emphasis on marrying airport business and financial planning with facility planning;
  - emphasis on sustainability (environmental, economic and financial) and energy management;
  - intermodal planning considerations;
  - consideration of NextGen initiatives, technologies and procedures in the master planning process; and
  - new tools to aid the planning and airport development process including safety management systems and geographic information systems.
Airport Master Plans AC Update – Phased Approach

• In the near-term, we are focused on addressing recent policy changes that affect the AC, including, but not limited to, the provisions of the FAA Modernization and Reform Act of 2012.
• Our current approach is to complete a change to the AC in early FY 2014 and a more complete update to the AC will be completed in FY 2014 to address a broader set of objectives.
• We plan extensive industry outreach as we undertake this AC update.
Airport Master Plans – Phase 1 Update (Change 2)

- **Scope (Principal changes):**
  - Address provisions of the FAA Modernization and Reform Act of 2012, including:
    - passenger convenience, airport ground access, and access to airport facilities (Section 131)
    - AIP definitions (Section 132)
    - Solid waste recycling guidance (Section 133) [may be issued as a Planning Guidance Letter and later integrated into the AC]
  - Incorporate updates related to the recent revision to AC 5300-13A, Airport Design
  - Incorporate new standard operating procedure on Airport Layout Plans (ARP SOP 2) including the national ALP checklist
- **Industry outreach:** Ongoing
- **Schedule:** Industry review/comment, July 2013; publication by January 2014

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Airport Master Plans AC – Phase 2 Revision

• A full revision to the Airport Master Plan AC will be achieved in Phase 2
• FAA will seek additional input on the scope of the AC update through industry coordination meetings and outreach at workshops, industry forums and conferences
• The revision will:
  – Update Chapter 7, Aviation Forecasts, to include a discussion related to uncertainty in aviation demand forecasting, alternative forecast approaches (e.g., scenario forecasting), and peak demand calculations.
  – Incorporate Airports GIS requirements, referencing survey requirements identified in ACs 150/5300-16, 17 and 18 and electronic ALP (eALP) guidance
  – Update Airport property map (Exhibit A) requirements to correspond with the Exhibit A SOP, and to ensure airport sponsors are collecting the proper data in accordance with applicable sponsor assurances.
  – Discuss the integration of safety management systems (SMS) into the master planning process including references to new guidance and how to incorporate SMS in the alternatives evaluation process.
Airport Master Plans AC – Phase 2 Update (2)

• Scope (continued):
  – Revise other appendices and add new appendices to address changes since the last AC update, including new guidance related to critical design aircraft and runway length analysis.
  – Provide updated links/references to new guidance, including the revised citizen participation AC, airport design AC, and relevant published ACRP research by reference, as appropriate.
  – Incorporate compatible land use considerations, with appropriate references to the updated guidance on airport land use compatibility, wildlife hazard management, and sustainability. Discuss evolving airport design standards, including standards that could affect on- and off-airport land use.
  – Identify intermodal planning considerations to be addressed during the master planning process, and associated coordination with stakeholders.
Airport Master Plans AC – Phase 2 Update (3)

• Scope (continued):
  – Discuss the relationship between the airport system planning process and the airport master plan, and ways to align both processes to enhance the airport development process.
  – Identify NextGen activities/initiatives that may impact airport geometry and infrastructure, including obstruction removal considerations for general aviation airports with new LPV approaches, airport surface impacts, NAVAIDS, etc.
  – Identify considerations related to the short- (5-10 years), medium- (10-20), and long-range (beyond 20 years) visions for the airport.
  – Address the integration of civil unmanned aircraft systems (UAS) in the NAS, and reference any relevant agency guidance, ACRP research or other relevant resources.
  – Identify specific planning considerations related to commercial space launch facilities.
  – Update references to TSA Recommended Security Guidelines for Airport Planning, Design and Construction, particularly in determining need for expanded airport terminal facilities, and other relevant industry guidance related to airport security.
Airport Master Plans AC – Phase 2 Update (4)

• Scope (continued):
  – Address the link between airports and economic development, including the growing interest in airport-centered development (airport cities concept).
  – Emphasize the importance of adequate planning analysis prior to initiating environmental review.
  – Review and potentially expand the discussion on financial feasibility analysis.
  – Update links and references to design standards set forth in the Airport Design AC, including considerations related to runway protection zones and end around taxiways.
  – Address the need for a more flexible approach to airport master planning – one that considers the complex business, financial, social, and environmental considerations that influence airport development and enables an airport to tailor the Master Plan scope of work to better achieve individual airport and community objectives.
  – Consider the nexus of business and financial planning in the development of the master plan (including consideration of non-aeronautical activities to expand airport revenue).
FAA Airport Land Use Compatibility Advisory Circular – Background

• AC 150/5190-4A, A Model Zoning Ordinance to Limit Height of Objects Around Airports
  – Published December 14, 1987

• Section 160 of Vision 100, Century of Aviation Reauthorization Act, provided funding for compatible land use planning and projects by state and local governments around large and medium hub airports

• Section 153 of the FAA Modernization and Reform Act of 2012 extended compatible land use planning grant authority through September 2015

• Memorandum of Understanding between FAA and NASAO

• ACRP Report 27, Enhancing Airport Land Use Compatibility
Airport Land Use Compatibility Guidance – Overview of the AC Update

• **Purpose:** To assist local governments and airport owners to understand the effects of incompatible land use on the safety and utility of airport operations and identify compatible land use development tools and techniques to protect surrounding communities from adverse impacts associated with airport operations.

• The AC update will draw on extensive research conducted for Airport Cooperative Research Program (ACRP) Report 27, Enhancing Airport Land Use Compatibility.

• **Coordination and Input:**
  – FAA Working Group with all FAA Regions represented
  – NASAO, AAAE, ACI, ACC, and other interested industry groups
  – Other stakeholders, including the American Planning Association

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Airport Land Use Compatibility AC – Table of Contents

Chapter 1 – Introduction

Chapter 2 – Land Use Compatibility Concerns

Chapter 3 – Roles and Responsibilities of Stakeholders

Chapter 4 – Airport and Local Land Use Planning Coordination

Chapter 5 – Federal Land Use Regulations and Guidance

Chapter 6 – Tools and Techniques for Land Use Compatibility

Appendices – Other resources
Other guidance
Energy Efficiency of Airport Power Sources

• FAA is developing technical guidance to implement Section 512 of the FRMA to fund stand alone energy conservation measures (ECMs) at any public use airport eligible for AIP funding

• Specifics about Section 512
  – Airport sponsor must complete an Energy Assessment before FAA can issue grant for eligible projects
  – The energy assessment is a comprehensive study of airport’s energy requirements, including heating and cooling, base load, back-up power, and power for on-road airport vehicles and ground support equipment

• Three broad categories of eligible ECMs:
  – On-airport electrical energy production such as solar photovoltaic (PV) arrays or hydrogen powered generation
  – Stand-alone upgrades to incorporate ECMs in an AIP-eligible sponsor facility (i.e., HVAC, hot water heater, lighting)
  – Incorporating an ECM into an AIP-eligible vehicle

• Schedule: Spring 2014 – industry review; Summer 2014 – publish final guidance

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Technical Guidance for Evaluating Selected Solar Technologies on Airports

• Existing document published in 2010 understates the potential for ocular impact due to glare
• FAA is revising document to define a planning process that evaluates potential solar PV locations on an airport to ensure there is no ocular impact to pilots or air traffic control facilities
• Revised technical guidance document slated for publication in FY 2014
• FAA and Department of Energy developed the **Solar Glare Hazardous Analysis Tool (SGHAT)** to assess ocular impact
  – a web-based tool for use in assessing the viability of proposed solar PV sites on or in the vicinity of an airport
  – analyzes the potential for glare from an installation throughout the year
  – can assess alternative configurations to ensure no harmful glare to air traffic personnel or pilots

Contact: Steve Debban, steven.debban@faa.gov
Oil and Gas Development on Federally Obligated Airports

• Purpose: Address the need for comprehensive guidance related to planning for, siting, and operating oil and gas facilities on airports, including review of applicable planning, airport design, airspace, safety and standards, environmental, compliance and other applicable FAA guidance and regulations

• Schedule:
  – Industry outreach: Spring 2014
  – Publication: Summer 2014

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