

# FAA Modification of Standards Process

**Presented to:** ICAO – Colombia Webinar

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**Federal Aviation  
Administration**

We are  
**Airports**

# Overview

- **FAA's MOS Process**



# MOS Overview

- **MOS definition, requirements and process are found in FAA Order 5300.1G**

- **MOS Definition:**

**“Any deviation from, or addition to standards, applicable to airport design, material, and construction standards, or equipment projects resulting in an acceptable level of safety, useful life, lower costs, greater efficiency, or the need to accommodate an unusual local condition on a specific project through approval on a case-by-case basis.”**



# What does MOS pertain to?

- **Projects involving Federal funds OR** as required to support public approach procedure
- Applicable to design AC 5300-13 and lighting (5300 series ACs)
- Construction methods and materials (AC 5370-10)
- Equipment Projects (AC 5200 series)
- Only Airports Division standards

	<b>U.S. DEPARTMENT OF TRANSPORTATION</b> <b>FEDERAL AVIATION ADMINISTRATION</b>	<b>ORDER NUMBER</b> <b>5300.1G</b>
	National Policy	Effective Date: 9/29/17
<b>SUBJ:</b> Modifications to Agency Airport Design, Construction, and Equipment Standards		
<p><b>1. Purpose of this Order.</b> This order establishes the process for the initiation, revision, coordination, and management of Modifications of Standards (MOS) applicable to airport design, construction material, and equipment projects. This order is the foundation of a web-based automated application of MOS. The automated application for submitting MOS is a step-by-step process facilitated within Airports Geographic Information System (AGIS).</p>		

# Construction

- Most common type of MOS



# Design



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# WHY DEVIATE FROM STANDARDS?

- Accommodate unusual local conditions
- Material availability
- Better efficiency
- Lower cost without sacrificing safety or efficiency



# What triggers a MOS?

- A deviation from airport design standards
- If available **materials** cannot meet specifications or are at a significantly higher cost
- If modified **construction installation methods** and tolerances would result in cost savings or greater efficiency without sacrificing safety or useful life
- Unusual local conditions do not allow the equipment specifications to be met
- If local laws and regulations require **general provision** modifications.



# What isn't a MOS

- An approved MOS cannot be modified. The airport must submit a new MOS if changes are needed.
- MOS is not used for:
  - Non-standard RSA dimensions.
  - Non-standard Obstacle Free Zone (OFZ) surfaces.
  - Non-standard approach / departure surfaces.
  - To match existing equipment owned by the airport.
  - Impermissible land use within Runway Protection Zone (RPZ) limits.



# Existing Conditions versus Proposed

## **Existing** *“What is done, is done”*

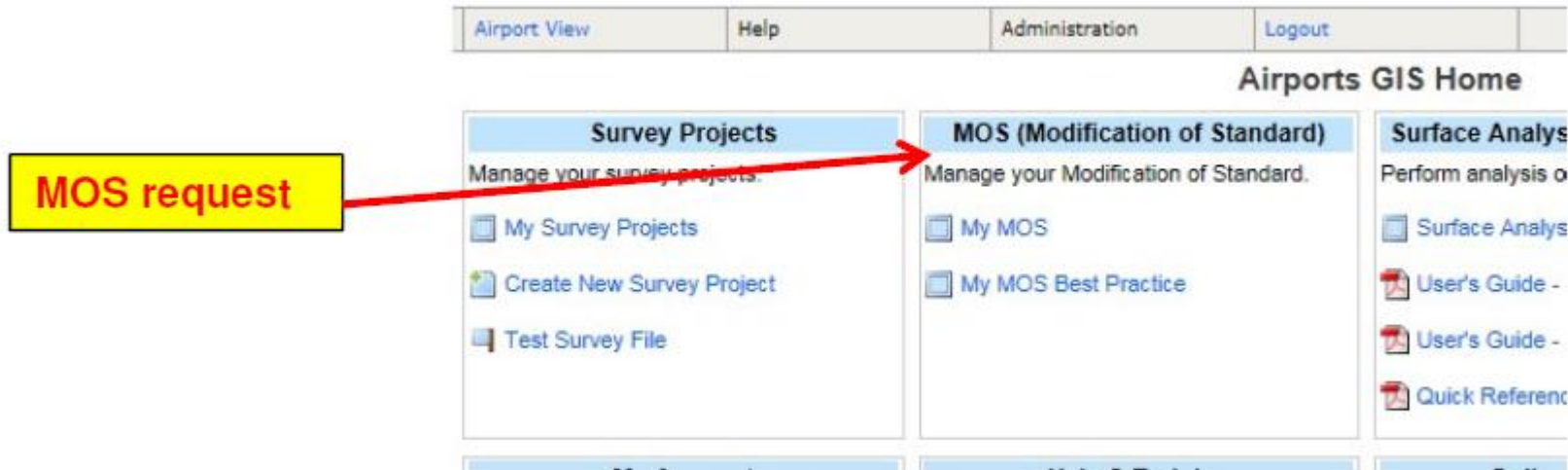
- MOS’s are intended to study fixes to maintain safety, not just accept what exists. It is rare that existing situations trigger MOS process.
- Prior to FAA ALP approval for non-standard condition to remain
- Proposed operations that increase service level (Cat I to Cat II)

## **Proposed**

- Airport Layout Plan designs that do not meet standards require MOS approval prior to ALP approval
- Proposed designs for FAA project grants must meet standards or have a prior approved MOS
- New (scheduled) operations by a higher design category aircraft
- Proposed waiver or ATC SOP change

# MOS process

- In 2017, the FAA Airports Division started using a new online tool to process MOS's through the FAA web based Airport Data Information Portal (ADIP)



# Components of a MOS

- **Justification:** What are the needs and benefits of the parallel taxiway. Operational impact, efficient use of airport.
- **Alternatives:** Explain what impede conformance with standards. Physical restriction, impact to other parts of the airfield etc...Cost is NOT a justification
- **Acceptable level of safety.** Demonstrate that the reduction in safety is not significant to the airport operation. An SRM may be needed.



# Who is involved?

→ Airport Sponsor (with consultant)

→ Airport District Office PM/Planner

→ Regional Office

→ SMS specialist, ACSI, Regional Engineer

→ Lines of Businesses (LsOB)

- FAA uses the OE/AAA platform as a vehicle to coordinate LsOB review

→ FAA Headquarters



# WHO IS INVOLVED?

- FAA
  - ADO
  - Regional Office
  - Headquarters
  - Others as needed



Draft	<input checked="" type="checkbox"/>	Sponsor	<input checked="" type="checkbox"/>	ADO Pre-Approval	<input checked="" type="checkbox"/>	Region Pre-Approval	<input checked="" type="checkbox"/>	HQ Approval	<input type="checkbox"/>	Region Post-Approval	<input type="checkbox"/>	ADO Post-Approval	<input type="checkbox"/>	Notes	<input type="checkbox"/>
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# Approval Authority

## Appendix A

U.S. Department of Transportation  
Federal Aviation Administration

### MODIFICATIONS OF AIRPORT DESIGN, CONSTRUCTION, AND EQUIPMENT STANDARDS

This table lists MOS categories and subcategories. An “X” in each row indicates whether ARP regions or headquarters can approve each type of MOS or whether a MOS is applicable. This Appendix is not all inclusive, and is subject to the discretion of the Director of Airport Safety and Standards based on specific details in a MOS submittal.

Category	Sub Category	ARP Region	ARP HQ	MOS Not Applicable
Airport Equipment Standards	Painting Marking and Lighting of Vehicles on the AOA		X	
Airport Equipment Standards	Design Specifications for Snow Removal, Aircraft Rescue & Fire Fighting and other equipment.		X	
Airport Equipment Standards	Installation and Acceptance Standards for Snow Temperature Sensors, Foreign Object Detection and other equipment		X	
Airport Equipment Standards	Operational/Performance Standards for Snow Removal and Aircraft Rescue & Fire Fighting equipment		X	
Airport Equipment Standards	Other		X	
ATC Facility	Automated Weather Systems - Automated Weather Observing System (AWOS)/ Automated Surface Observing System(ASOS)		X	
ATC Facility	Runway Visual Range		X	
Design	Blast Pad Dimensions	X		
Design	Clearway			X



# Items to Keep in Mind

## **Modifications aren't the permanent solution:**

- MOS do not run in perpetuity.
- Project specific deviations normally remain in effect for the life-cycle of the applicable project.
- Airport geometry modifications expire no later than 5 years from final approval (Airport Sponsor can reapply).

## **Sponsor can't Mod a Mod:**

- Changes after approval require submittal of a new MOS.

## **Cost is not the only consideration:**

- Do not issue MOS to compensate for lack of necessary planning or budgeting.



# Questions



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