

# Safety and Engineering

## Modification of Standards (MOS) A-GIS Tool & FAA Order 5300.1G

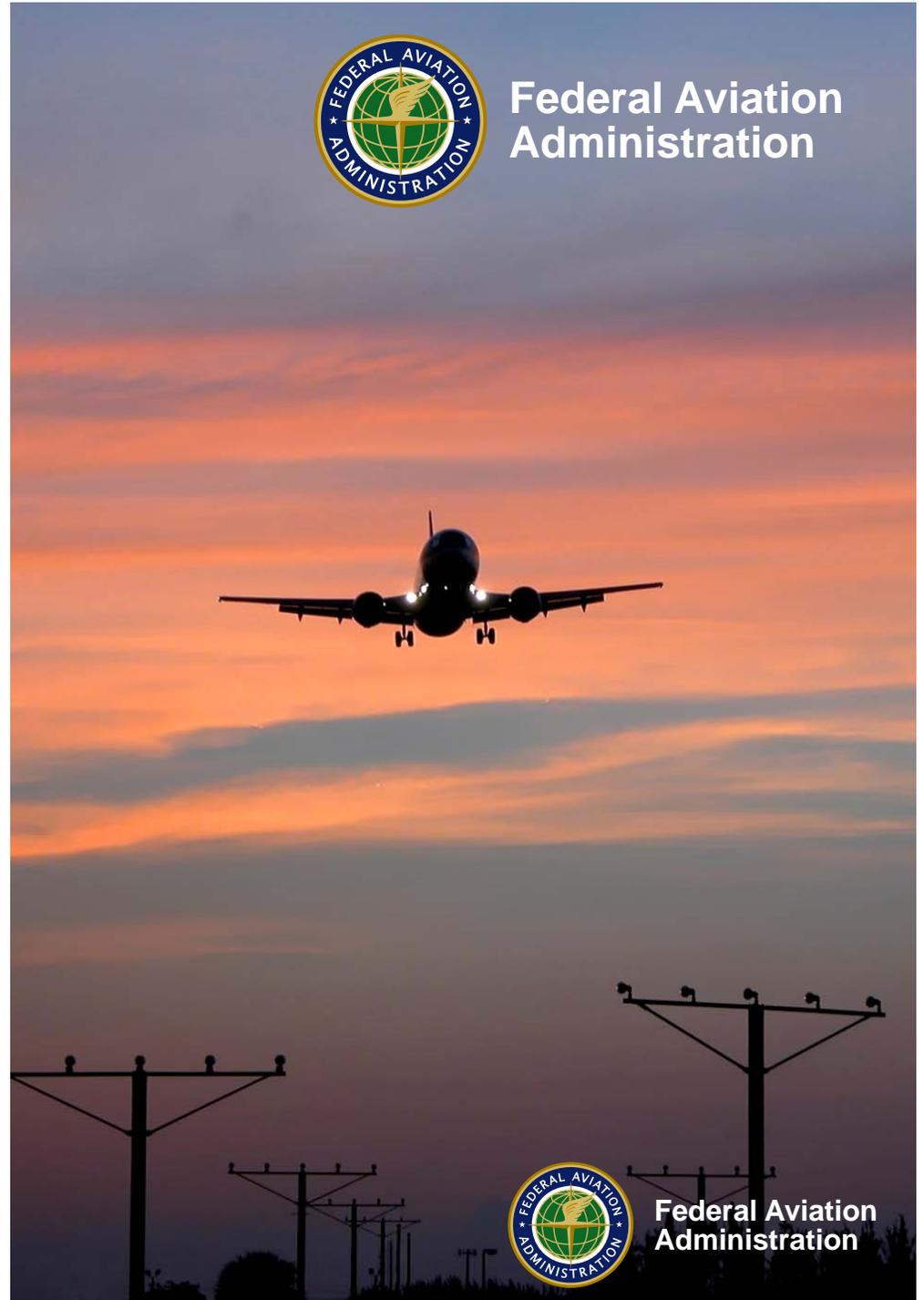
Prepared for: 2018 Southwest Region Airport Conference

Presented by: Lana Page Logan, P.E.  
Regional Engineer,  
Airports Safety &  
Standards Branch, ASW-622

Date: January 30, 2018



Federal Aviation  
Administration



Federal Aviation  
Administration

# What is a Modification of Standard?

**“Modification of Standards (MOS)” means any change to FAA standards, other than dimensional standards for RSAs or equipment standards for ARFF vehicles, applicable to:**

- Airport design\*;
- Construction (new, reconstruction, expansion or upgrade); or
- Equipment procurement project; or
- General Provision (GP) alterations.

**\*NOTE: MOSs to geometrics standards, must be noted in the MOS table on the ALD/ALP with FAA approval date and airspace [MOS ID] number.**



# What is NOT a Construction Modification of Standard?

- **Proper editing of AC 150/5370-10:**
  - Engineering notes, shown between asterisk lines, explain the options available to the Engineer when developing the spec and the appropriate changes that are allowed or [bracket] choices that must be made;
  - Deletion of entire paragraphs if N/A to the project;
  - Additional sentences may be added, as long as it does modify the construction materials, methods, standards, or QC and QA testing. Clarifications only.
- **Please show ~~changes~~ **edits** with **track changes** on for P&S review submittal**



# Why do I need FAA approval for a MOS?

- **Grant Assurance 34. Policies, Standards, and Specifications.**
  - It will carry out the project in accordance with policies, standards, and specifications approved by the Secretary including but not limited to the advisory circulars listed in the Current FAA Advisory Circulars for AIP Projects, dated 7/1/05 and included in this grant, and in accordance with applicable state policies, standards, and specifications approved by the Secretary.



# Why do I need FAA approval for a MOS?

- **Sponsor Certification of Project Plans and Specifications (FAA Form 5100-132):**
  1. The plans and specifications were prepared in accordance with applicable Federal standards and requirements, so no deviation or modification to standards set forth in the advisory circulars, or State standard, is necessary other than those previously approved by the FAA.

**If not approved in advance, alterations will jeopardize FAA's ability to fund the expenditures!**



# Where is the MOS Tool? ... AGIS

<https://airports-gis.faa.gov/public/index.html>

See the [New User Registration](#) form.

If you **DO NOT** have **@faa.gov** in your email address :

[Login for Non-FAA Personnel](#)

The screenshot shows the homepage of the Airports Geographic Information System (AGIS). At the top left is the Federal Aviation Administration logo. A green callout bubble points to the 'New User Registration' link in the left sidebar. A red callout bubble points to the 'Login for Non-FAA Personnel' link in the main content area. The main content area includes sections for 'Airports GIS Login' and 'Airports GIS User Registration'. The 'Airports GIS Login' section has two boxes: one for '@faa.gov' users with a 'Login for FAA Personnel' link, and one for non-@faa.gov users with a 'Login for Non-FAA Personnel' link. The 'Airports GIS User Registration' section has a 'Need an account?' link. Below these is a box for 'Airports GIS Support Desk' with an 'Access Here' link. At the bottom, there is an 'IMAGERY Deliveries to FAA' section with instructions on how to submit data.

**Airports GIS**

- [Login](#)
- [Newsletters/Publications](#)
- [Airports GIS Online Help](#)
- [Airports GIS Support Desk](#)
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  - [Steps to Follow](#)
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  - [Survey Intro](#)
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  - [Airport Visual Aids](#)
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  - [Wind Analysis](#)

**Airports Geographic Information System (Airports GIS)**

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[Access Here](#)

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Two imagery requirements exist: ORTHO and RAW. To insure the RAW imagery is delivered to NGS in a timely manner please make sure you do the following:

- Clearly identify what you are sending marking ORTHO or RAW.
- Do not combine the imagery on a single CD, Flash Drive or HD. Please separate each submission.
- Please indicate the AGIS project number.



# New User Registration

## Requested Role:

Airport Sponsor  
Airport Staff  
Consultant  
FAA Airports  
FAA Airports GIS  
FAA Responsible Party  
Flight Procedures  
Flight Standards  
FSDO

• Email Address:

• Password:

• Confirm Password:

• First Name:

Middle Name:

• Last Name:

• Position:

• Phone Number:  x

Alt Phone:

Fax Number:

• Organization:

• Street 1:

Street 2:

• City:

• State:

• Postal Code:

**Requested Role and Access Level**

• Reason for Account:

• Requested Role:



# Sponsor AGIS Home Page

**ONLY SPONSORS CAN CREATE AN MOS!**

## Airports GIS Home

<b>Survey Projects</b> Manage your survey projects. <a href="#">My Survey Projects</a> <a href="#">Create New Survey Project</a> <a href="#">Test Survey File</a>	<b>Modification of Standard (MOS)</b> Manage your Modification of Standard. <a href="#">My MOS</a> <a href="#">Create New MOS</a>	<b>Surface Analysis and Visualization</b> Perform analysis of runway obstructions. <a href="#">Surface Analysis and Visualization</a> <a href="#">User's Guide - Booklet format</a> <a href="#">User's Guide - 8.5 x 11 format</a> <a href="#">Quick Reference Guide</a>	<b>Imagery and Data</b> View and upload / download airport data <a href="#">My Imagery</a> <a href="#">My Airport Data</a>
<b>My Account</b> Welcome, Southwest Sponsor. <a href="#">Update Account Information</a> <a href="#">Change Password</a>	<b>Help &amp; Training</b> Learn more about Airports GIS. <a href="#">Airports GIS Home</a> <a href="#">Support Desk</a> <a href="#">Online Help</a> <a href="#">IDLE Training</a>	<b>Online Resources</b> Access the virtual library. <a href="#">National Geodetic Survey (NGS)</a> <a href="#">Aeronautical Information Services (AJV-5)</a> <a href="#">NFDC Portal</a> <a href="#">AC 150/5300</a>	<b>System Information</b> Version 5.0.0 - deployed 09/29/2017. <a href="#">View Release History and Notes</a> <a href="#">Feedback Form</a>



# Sponsor MOS Creation Screens

## Create New MOS

**Airport Background**

• MOS Type:  ▾

• Airport:  ▾

AIP Grant Number:  [Add/Delete AIP Grant Number](#)

PFC Number:  [Add/Delete PFC Number](#)

**NOTE:** If you do not have either AIP or PFC number, click Next.

## Create New MOS

**Airport Background**

Airport: TUL

MOS Type: Draft-to-Final

Sponsor: Southwest Sponsor

AIP Grant Number:

PFC Number:



# Sponsor Post MOS Creation Screen

The screenshot shows the 'MOS Summary' page for 'TUL\_2018\_03222 Summary'. A green box highlights the 'MOS Summary' tab, and a red oval highlights the title 'TUL\_2018\_03222 Summary'. A yellow banner at the top indicates 'New draft-to-final MOS created.' Below this is a navigation bar with tabs: 'MOS Summary', 'Draft', 'Sponsor', 'ADD Pre-Approval', 'Region Approval', 'ADD Post-Approval', and 'Notes'. The main content area is divided into sections: 'MOS Summary' (with fields for Airport, City, AC Title, AC Number, and FAA Approval Authority), 'MOS Sponsor Information' (with fields for Contact Name, Position, Address, Phone, and Email), 'MOS Documents', 'Utilities', and 'Online Help/Resource'. A 'Sponsor Delegation' section is highlighted with a purple box, showing a table with columns for 'User Name', 'Organization', 'Position', and 'Email'. The table contains one entry: 'Southwest Sponsor', 'test.org.', 'Sponsor', and 'asvsponsor@airport.com'. A purple box also highlights the 'Sponsor Delegation' link in the left sidebar.

**MOS Summary**

**TUL\_2018\_03222 Summary**

New draft-to-final MOS created.

MOS Summary Draft Sponsor ADD Pre-Approval Region Approval ADD Post-Approval Notes

Project Status: Draft review

**MOS Summary**

Airport TUL TULSA INTL  
City (State) TULSA (OK)  
AC Title N/A  
AC Number --  
FAA Approval Authority TBD

**MOS Sponsor Information**

Contact Name: Southwest Sponsor  
Position: Sponsor  
Address: test.org., 123 Main st., test City, OK 25879  
Phone: 123-456-7890  
Email: asvsponsor@airport.com

**MOS Documents**

View All Documents (0)

**Utilities**

**Online Help/Resource**

MOS Online Help  
FAA Airport Diagram Search

**Sponsor Delegation**

User Name	Organization	Position	Email
Southwest Sponsor	test.org.	Sponsor	asvsponsor@airport.com

- **Sponsor has Two Choices**
  - Input MOS information him/herself
  - Delegate a Staff Member or Consultant to Prepare



# Sponsor Delegation Screen

- Presently 113 pages of Consultant names

All Users for Sponsor Delegation:

Records 1 to 20 of 2259 [+Add Filter](#)      << Previous Page  Next Page >>      Rows per Page:  Page 1 of 113

User Name ▼	Organization	Position	Role	Email	Phone Number
Zook, Marlin	Quantum Spatial, Inc.	VP/PRoduction Mgr.	CONSULTANT	mzook@quantumspatial.com	703-471-4510
Zitzow, Matthew	TKDA	Consultant Engineer	CONSULTANT	matt.zitzow@tkda.com	651-925-6545
Zitzow, Matthew	Short Elliott Hendrickson, Inc.	Professional Engineer	CONSULTANT	mzitzow@sehinc.com	651-357-2575
Zitzman, Suzanne	Maser Consulting P.A.	Dir of GIS Services	CONSULTANT	szitzman@maserconsulting.com	610-868-4201
Zimney, Mike	Ulteig Engineers	GIS Analyst	CONSULTANT	mike.zimney@ulteig.com	701-280-8684
zimmerman, duane	david evans and associates	land surveyor	CONSULTANT	dlz@deainc.com	509-327-8697
Ziegler, Wolfgang	GRW Aerial Surveys, Inc.	GPS MGR	CONSULTANT	wziegler@grwinc.com	859-223-3999
Ziegler, Samuel	SSI Computer Services LLC	Pilot	CONSULTANT	shmuelz@optonline.net	845-352-7956
ziegler, mark	Aero-Metric	GIS technician	CONSULTANT	mziegler@aerometric.com	571-481-7526
Zick, Brian	Shumaker Consulting Engineerin...	Field Survey Coordinator	CONSULTANT	bzick@shumakerengineering.com	607-798-8081
Zhang, Zhenglu	Westchester County GIS	Software Architect	CONSULTANT	zqz1@westchestergov.com	914-995-5347
Zhang, Xun	ATO solution architecture	Software architect	CONSULTANT	xun.ctr.zhang@faa.gov	240-498-2960
Zhang, Shawn	Spatial Front	GIS Developer	CONSULTANT	shawn.zhang@spatial.com	571-205-9825
Zentner, Shane	Woolpert, Inc.	GIS Specialist	CONSULTANT	shane.zentner@woolpert.com	303-925-1400
Zellers, Susan	Indianapolis Airport Authority	Airport Planner	CONSULTANT	szellers@indianapolisairport.c...	317-487-5130
Zellers, Susan	Hanson Professional Services I...	Senior Aviation Planner	CONSULTANT	szellers@hanson-inc.com	317-803-8954
Zeger, Lee	Buchart Horn, Inc.	Senior Engineer	CONSULTANT	lzeger@bh-ba.com	814-237-7111
Zeets, Steven	Terraplane LLC	Geospatial Professional	CONSULTANT	steve@terraplanellc.com	319-521-0054
Zeets, Steven	Foth Companies	Land Surveyor	CONSULTANT	steve.zeets@foth.com	319-365-9565
Zarlengo, Michael	Atkins	Professional Land Surveyor	CONSULTANT	michael.zarlengo@atkinglobal...	770-933-0280

## MOS Delegation Sponsor Users

User Name	Organization	Position	Office Level	View	Update	Coordinate	Delete
-----------	--------------	----------	--------------	------	--------	------------	--------

There are no Delegate users associated with the MOS on Sponsor level.

[Save / Update](#)   [Exit Sponsor Delegation](#)



# Sponsor Delegation is Filterable by:

All Users for Sponsor Delegation:

Records 1 to 20 of 2258 -Remove Filter    « Previous Page Page 1 Next Page »    Rows per Page: 20 Page 1 of 113

User Name	Organization	Position	Role	Email	Phone Number

Enter text in any column above and click Apply Filter.    Apply Filter

**Name** (User Name)

**Position** (Position)

**Email** (Email)

**Organization** (Organization)

**Role** (Role)

**Phone** (Phone Number)



# Sponsor Delegation is Sortable

Rows per Page:  Page 1 of 113

Email	Phone Number
rcnimmer@ziaeec.com	575-532-1526
rgraham@zhengineering.com	602-997-7536
geoffrey.ctr.baskir@faa.gov	817-321-7815
jwaynemorrison@bellsouth.net	662-746-1863
scott@wbdevelopment.com	254-953-5353
dyager@yagerconsultants.com	419-537-9479
jwhite@x-spatial.com	310-862-1306
bweaver@wwcengineering.com	307-672-0761
don.darrah@wspells.com	518-452-3545
ted.covill@wspgroup.com	508-248-1970
darren.hardy@wspells.com	603-595-7900
kristin.demers@wspells.com	518-452-3545
rworthey@wortech.com	409-866-9769
benjamin.messer@woolpert.com	614-827-6230
kevin.shirer@woolpert.com	602-426-8900
jeff.botham@woolpert.com	937-531-1351
calvin.johnson@woolpert.com	440-998-7984
ian.fyvie@woolpert.com	618-632-2856
beverly.allen@woolpert.com	937-531-1245
shane.zentner@woolpert.com	303-925-1400

Rows per Page:  Page 1 of 113

Email	Phone Number ▲
jchangfong@avports.com	102-288-5218
fellipe.a.u@gmail.com	118-228-6196
awpconsultant@consultant.com	123-456-7890
aeaconsultant@consultant.com	123-456-7890
vkanupa7@test.com	123-456-7890
aceconsultant@consultant.com	123-456-7890
aalconsultant@consultant.com	123-456-7890
aglconsultant@consultant.com	123-456-7890
anmconsultant@consultant.com	123-456-7890
aneconsultant@consultant.com	123-456-7890
asoconsultant@consultant.com	123-456-7890
kanupaconsultant@cghtech.com	123-456-7890
vkanupa6@test.com	123-456-7890
democonsultant@test.com	123-456-7890
nconsultant@test.com	123-456-7891
tim.mccarthy@nuim.ie	202-223-4544
mark.ctr.conaway@faa.gov	202-267-5091
amalio.ctr.escobar@faa.gov	202-267-6024
jessie.ctr.williams@faa.gov	202-267-9398
walter.cofer@auatac.com	202-314-1120



# Adding Delegates

After clicking Consultant's name, it will ask you (Sponsor) their role...

Do you want to add this user to the delegation for this MOS?

Authorization:

View  Update  Coordination

At bottom of page a list is generated of those who can look at (view) and work on (update)

MOS Delegation Sponsor Users							
User Name	Organization	Position	Office Level	View	Update	Coordinate	Delete
David Hartmann	Armstrong Consultants Inc.	Civil Engineer	SPONSOR	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<a href="#">Delete</a>



# Sponsor MOS Creation & Delegation Demo



Federal Aviation Administration

## Airports GIS

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[FAA.gov Home](#) | [Privacy Policy](#) | [Web Policies & Notices](#) | [Contact Us](#) | [Help](#)

Readers & Viewers: [PDF Reader](#) | [MS Word Viewer](#) | [MS PowerPoint Viewer](#) | [MS Excel Viewer](#) | [WinZip](#)

<http://172.25.110.136:8080/agis/actions/PermissionAction?action=showLoginForm>



Federal Aviation Administration

# Consultants AGIS Home Page

Delegated Consultant will now have an MOS in the “My MOS” list

**Airports GIS Home**

<p><b>Survey Projects</b></p> <p>Manage your survey projects.</p> <ul style="list-style-type: none"><li><a href="#">My Survey Projects</a></li><li><a href="#">Test Survey File</a></li></ul>	<p><b>Modification of Standard (MOS)</b></p> <p>Manage your Modification of Standard.</p> <ul style="list-style-type: none"><li><a href="#">My MOS</a></li></ul>	<p><b>Surface Analysis and Visualization</b></p> <p>Perform analysis of runway obstructions.</p> <ul style="list-style-type: none"><li><a href="#">Surface Analysis and Visualization</a></li><li><a href="#">User's Guide - Booklet format</a></li><li><a href="#">User's Guide - 8.5 x 11 format</a></li><li><a href="#">Quick Reference Guide</a></li></ul>	<p><b>My Account</b></p> <p>Welcome, Southwest Consultant.</p> <ul style="list-style-type: none"><li><a href="#">Update Account Information</a></li><li><a href="#">Change Password</a></li></ul>
<p><b>Help &amp; Training</b></p> <p>Learn more about Airports GIS.</p> <ul style="list-style-type: none"><li><a href="#">Airports GIS Home</a></li><li><a href="#">Support Desk</a></li><li><a href="#">Online Help</a></li><li><a href="#">IDLE Training</a></li></ul>	<p><b>Online Resources</b></p> <p>Access the virtual library.</p> <ul style="list-style-type: none"><li><a href="#">National Geodetic Survey (NGS)</a></li><li><a href="#">Aeronautical Information Services (AJV-5)</a></li><li><a href="#">NFDC Portal</a></li><li><a href="#">AC 150/5300</a></li></ul>	<p><b>System Information</b></p> <p>Version 5.0.0 - deployed 09/29/2017.</p> <ul style="list-style-type: none"><li><a href="#">View Release History and Notes</a></li><li><a href="#">Feedback Form</a></li></ul>	



# Consultant/Sponsor Draft Tab Screen

Draft Tab

Background Subtab

TUL\_2018\_03222 Draft

Successfully saved.

MOS Summary Draft Sponsor ADO Pre-Approval Region Approval ADO Post-Approval Notes

Southwest, your next action(s): Create Draft. Project Status: Draft review

MOS Summary

Airport TUL TULSA INTL  
City (State) TULSA (OK)  
AC Title N/A  
AC Number --  
FAA Approval Authority TBD

MOS Sponsor Information

Contact Name: Southwest Sponsor  
Position: Sponsor  
Address: test wrg,  
123 Main st,  
test City, OK 25879  
Phone: 123-456-7890  
Email: asvsponsor@airport.com

MOS Documents

View All Documents (0)

Utilities

Add Document/File

Online Help/Resource

MOS Online Help  
FAA Airport Diagram Search

Background Modification of Standards Review Draft

BACKGROUND

Airport: TUL/TULSA INTL Location (City, State): TULSA, OK LOC ID: TUL

NOTE: Selections/Changes to data made in this MOS will not update NFDC.

Affected Runway:

08/26  
 18L/36R  
 18R/36L

Approach (Each Runway):

18L:  PIR  NPI  VISUAL    
36R:  PIR  NPI  VISUAL

Approach Ref. Code (APRC):  Departure Ref. Code (DPRC):

Add/Delete Affected Taxiway & TDG: Affected Taxiway Taxiway Design Group  
Add/Delete Affected Airports GIS Features: Affected GIS Features

Design Aircraft (Each Runway/Taxiway):  
NOTE: Please specify AC Model Number: ie: B-747-400  
MD-11

Add/Delete AIP Grant Number: AIP Grant Number:  
Add/Delete PFC Number: PFC Number:

Save Save and continue

Input information applicable to the MOS.



# Consultant/Sponsor Draft Tab Screen

Draft Tab

MOS Subtab

The screenshot displays the 'Draft Tab' interface for a 'Modification of Standards' (MOS) document. The top navigation bar includes tabs for 'MOS Summary', 'Draft', 'Sponsor', 'ADD Pre-Approval', 'Region Pre-Approval', 'HQ Approval', 'Region Post-Approval', 'ADD Post-Approval', and 'Notes'. The main content area is titled 'MODIFICATION OF STANDARDS' and includes fields for 'AC Number' (150/5320-6E), 'Chapter' (Chapt 3), 'Paragraph' (3.14.13 & Table 3-9), and 'Page Number' (3-56). A red circle highlights the 'Utilities' section, which contains an 'Add Document/File' button. Below this, there are sections for 'Explain Why Standard Cannot Be Used', 'Discuss Viable Alternatives (FAA Order 5300.1)', and 'Explain Why the Modification is Necessary to Conform to Local Laws and Regulations (if Applicable)'. The text in these sections discusses runway width modifications and joint spacing.

MOS Justification. Tell us your story.



# Consultant/Sponsor Draft Tab Screen

Draft Tab

Create Draft Subtab

TUL\_2018\_03222 Draft

Successfully saved.

MOS Summary | **Draft** | Sponsor | ADD Pre-Approval | Region Pre-Approval | HQ Approval | Region Post-Approval | ADD Post-Approval | Notes

Southwest, your next action(s): Create Draft. Project Status: Draft review

MOS Summary | Background | Modification of Standards | **Create Draft**

**BACKGROUND**

Airport: TUL TULSA INTL	Location (City, State): TULSA, OK	LOC ID: TUL
City (State): TULSA (OK)		
AC Title: Airport Pavement Design and Evaluation		
AC Number: 150/5320-6E	Approach (Each Runway): 18L: PIR, 36R: PIR	Approach Ref. Code (APRC): D/IV/2400, D/IV/2400
FAA Approval Authority: HQ		Departure Ref. Code (DPRC): D/IV, D/IV
Affected Runway: 18L/36R		
Affected Taxiway: Taxiway Design Group		GIS Affected Feature
Design Aircraft (Each Runway/Taxiway): MD-11		
AIP Grant Number:		
PFC Number:		

**MODIFICATION OF STANDARDS**

AC Number: 150/5320-6E	Chapter: Chapt 3	Paragraph: 3.14.13 & Table 3-9	Page Number: 3-56
Title of Standard Being Modified (Cite Reference of the Standard): Airport Pavement Design and Evaluation			AC Published Date: 09/30/2009
Engineer's Brief Code (EB): --			EB Published Date:
Airport Engineering Briefs:			
Category:			
Sub Category:			
Standard/Requirement: Maximum 20-foot Joint Spacing			
Proposed: Construct 25-foot wide PCC Paving lane adjacent to Connector TWs B, C1, E1, E2, F1, J1, J2 and J3.			
Explain Why Standard Cannot be Met (FAA ORDER 5300.1): Existing RW 18L-36R is 200' wide with 25'x25' PCC slabs. There is an expansion joint at each connector taxiway at 100' from the RW centerline. The new design reduces the runway width to 150' and no taxiway work is being performed in this project. The proposed RW lane widths are 18.75' to match Des... More			
Discuss Viable Alternatives (FAA ORDER 5300.1): One alternative is to use 2-12.5' wide lanes; another is to use an 18.75' lane and a 6.25' lane that will be sacrificial once the TWs are reconstructed. Since the slab lengths are 20', the length to width ratio greatly exceeds 1.25 and all of these slabs would need to be reinforced. Normal... More			
Explain Why the Modification is Necessary to Conform to Local Laws and Regulations (if Applicable): There are no safety issues with increasing the joint spacing to 25'; in these isolated areas. In fact, this will lead to a decrease in time for construction and using a shorter RW which will enhance safety of the airport. While construction is taking place, the RW approaches that are available are ... More			
State Why Modification Would Provide Acceptable Level of Safety, Economy, Durability, and Workmanship (FAA ORDER 5300.1): N/A			
Explain any Special Operational Procedures and/or Restrictions Necessary to Accommodate the Modification of Standards: N/A			

**Propose Draft** **Terminate MOS**

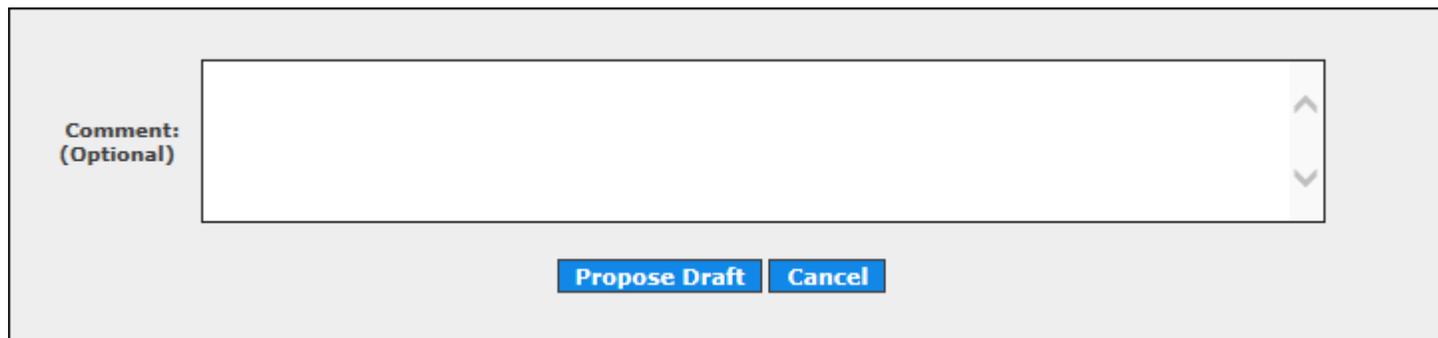
• Consultant/Sponsor has Two Choices

- Propose Draft
- Terminate MOS



# After you hit Propose Draft...

- You will get a pop-up where can input comments



The screenshot shows a light gray pop-up window. On the left side, the text "Comment: (Optional)" is displayed. To the right of this text is a large, empty white rectangular text input field with a vertical scrollbar on its right edge. Below the input field, there are two blue buttons with white text: "Propose Draft" and "Cancel".

- And Propose Draft Again.... MOS moves on for the Sponsor to take action.



# Sponsor's Next Steps

- Log back into AGIS and pull up the MOS under "My MOS" by MOS ID Number.

**MOS ID**  
TUL\_2018\_03343

MOS ID	Airport ID	Airport Name	Type	AC number	EB number	Category	Sponsor	City	State	Date Created	MOS Status	Workflow Step
TUL_2018_03343	TUL	TULSA INTL	Draft-to-Final	150/5370-10G	--	Materials	Southwest Sponsor	TULSA	OK	01/10/2018	In Progress	Final Draft
TUL_2018_03342	TUL	TULSA INTL	Draft-to-Final	150/5300-13A	--	Design	Southwest Sponsor	TULSA	OK	01/09/2018	In Progress	ADO Pre Approval
BYH_2018_03242	BYH	ARKANSAS INTL	Draft-to-Final	--	--		Southwest Sponsor	BLYTHEVILLE	AR	10/13/2017	In Progress	Draft
BYH_2018_03223	BYH	ARKANSAS INTL	Draft-to-Final	150/5370-10G	--	Materials	Southwest Sponsor	BLYTHEVILLE	AR	10/11/2017	In Progress	Final Draft
TUL_2018_03222	TUL	TULSA INTL	Draft-to-Final	150/5320-6E	--	Design	Southwest Sponsor	TULSA	OK	10/11/2017	In Progress	ADO Pre Approval

MOS Status	Workflow Step
In Progress	Final Draft
In Progress	ADO Pre Approval
In Progress	Draft



# Opening MOS reveals...

Home Projects Airport View Help Logout Print this page

TUL\_2018\_03343 Summary

**MOS Summary** Draft  Sponsor  ADO Pre-Approval  Region Pre-Approval  HQ Approval  Region Post-Approval  ADO Post-Approval  Notes 

 Southwest, your next action(s): Review, Submit on sponsor level Project Status: Sponsor review

**MOS Summary**

Airport TUL TULSA INTL  
City (State) TULSA (OK)  
AC Title Standards for Specifying Construction of Airports  
AC Number 150/5370-10G  
FAA Approval Authority HQ

**Airport Staff/Consultant Information**

[Sponsor Delegation](#)

User Name	Organization	Position	Email
There are no delegate Airport Staff/Consultant(s) associated with this MOS.			

**MOS Summary** **Draft**  **Sponsor**  **ADO Pre-Approval** 

 Southwest, your next action(s): Review, Submit on sponsor level



# Clicking on the Sponsor's Tab...

- Under Sponsor Tab, MOS is summarized for Sponsor's Review and Action

TUL\_2018\_03222 Sponsor

MOS Summary Draft Sponsor ADD Pre-Approval Region Pre-Approval HQ Approval Region Post-Approval ADD Post-Approval Notes

Southwest, your next action(s) Review, Submit on sponsor level Project Status: Sponsor review

**MOS Summary**

Proposed Draft	BACKGROUND
Airport: TUL TULSA INTL City (State): TULSA (OK) AC Title: Airport Pavement Design and Evaluation AC Number: 150/3220-6E FAA Approval Authority: HQ	Location (City, State): TULSA, OK LOC ID#: TUL
Airport: TUL TULSA INTL Affected Runway: 18L/36R	Approach (Each Runway): 18L: RIR 36R: FIR Approach Ref. Code (APRC): D7W/2400 D7W/2400 Departure Ref. Code (DPRC): D7W D7W
Affected Taxiway: Taxiway Design Group	GEN Affected Feature
Design Aircraft (Each Runway/Taxiway): MD-11 AIP Grant Number:	

**MOS Sponsor Information**

Contact Name: Southwest Sponsor  
Position: Sponsor  
Address: 3601 org, 123 Main st, 1645 City, OK 73179  
Phone: 123-456-7890  
Email: asponsor@airport.com

**MOS Sponsor Delegation**

Sponsor Delegation

**MOS Documents**

View All Documents (0) / Sponsor

**Utilities**

Add Document/Title

**MODIFICATION OF STANDARDS**

AC Number:	Chapter:	Paragraph:	Page Number:
150/3220-6E	Chapt 3	3.14.13 & Table 3-9	3-56
Title of Standard Being Modified (Cite Reference Document): Airport Pavement Design and Evaluation			AC Published Date: 09/20/2009
Engineering Brief Code (EB):			EB Published Date:

Maximum 20-foot Joint Spacing

Construct 25-foot wide shoulder lane adjacent to Connector TWs B, C1, E1, E2, F, F1, J1, J2 and J3.

Explain Why Standard Cannot be Met (FAA Order 5300.1):

Existing RW 18L-36R is 200' wide with 25'25" shoulders. There is an expansion joint at each connector taxiway at 100' from the RW centerline. The new design reduces the runway width to 150' and no taxiway work is being performed in this project. The proposed RW lane widths are 18.75' to match Des...

Discuss Viable Alternatives (FAA ORDER 5300.1)

One alternative is to use 2-12.5' wide lanes; another is to use an 18.75' lane and a 6.25' lane that will one day be sacrificial once the TWs are reconstructed. Since the slab lengths are 20', the length to width ratio greatly exceeds 1.25 and all of these slabs would need to be reinforced. Normal... None

Explain Why the Modification is Necessary to Conform to Local Laws and Regulations (if Applicable):

There are no safety issues with increasing the joint spacing to 25'; in these located areas. In fact, this will lead to a decrease in time for construction and using a shorter RW which will enhance safety of the airport. While construction is taking place, the RW approaches that are available are ... More

State Why Modification Would Provide Acceptable Level of Safety, Economy, Durability and Workmanship (FAA ORDER 5300.1):

N/A

Explain any Special Operational Procedures and/or Restrictions Necessary to Accommodate the Modification of Standards:

N/A

Submit Not Accept Terminate MOS

- Sponsor has Three Action Choices:

- Submit
- Not Accept
- Terminate MOS

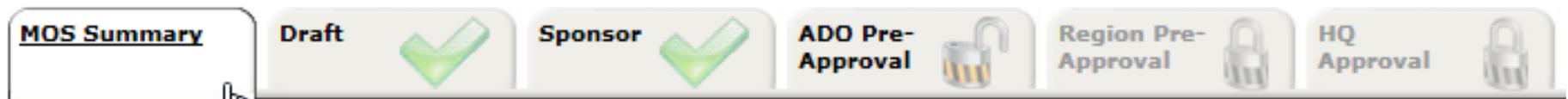


# A Pop-up Appears after Submitting

Sponsor Comment:  
(Optional)

By selecting this box, I certify that I have reviewed all aspects of this MOS and have Electronically Signed it.

And after checking the box and hitting Submit:



# Sponsor MOS Submittal Demo



Federal Aviation  
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## Airports GIS

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  - [Airport Regions](#)
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  - [Aviation Glossary](#)
  - [Aeronautical Information Manual \(AIM\)](#)
  - [Airport Visual Aids](#)
  - [Airport markings/Signs](#)
  - [Phonetic Alphabet](#)
- [Airport Design Tools](#)
  - [Windrose File Generator](#)
  - [Wind Analysis](#)

## Airports Geographic Information System (Airports GIS)

The Airports Geographic Information System (Airports GIS) helps the Federal Aviation Administration (FAA) collect airport and aeronautical data to meet the demands of the Next Generation National Airspace System.

Guided by Advisory Circulars (ACs), the Airport Sponsor or proponents are key links in the information chain. Use this Airports GIS web application to access airport data and submit changes matching defined business rules. FAA lines of business are notified once data has been submitted and approved.

### AGIS Announcements

- Newly Released MOS Tool Module is now available in Airports GIS.
- FAA Order 5300.1G has been released which establishes the process for the initiation, revision, coordination, and management of Modifications of Standards (MOS).
- AC 150/5300-17C Change 1 has been released - It has the Standards for Using Remote Sensing Technologies in Airport Surveys.
  - Major change was to the coverage area for Orthoimagery

### Airports GIS Login

We have changed how users are authenticated. FAA personnel (employees and contractors) will continue to use My Access. Non-FAA users will no longer use My Access.

If you have [@faa.gov](#) in your email address :

[Login for FAA Personnel](#)

If you **DO NOT** have [@faa.gov](#) in your email address :

[Login for Non-FAA Personnel](#)

### Airports GIS User Registration

Need an account? | See the [New User Registration](#) form. | FAA personnel should login to [My Access](#) before using this form.

Airports GIS Support Desk

[Access Here](#)

### IMAGERY Deliveries to FAA

Two imagery requirements exist: ORTHO and RAW. To insure the RAW imagery is delivered to NGS in a timely manner please make sure you do the following:

- Clearly identify what you are sending marking ORTHO or RAW.
- Do not combine the imagery on a single CD, Flash Drive or HD. Please separate each submission.
- Please indicate the AGIS project number.

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Readers & Viewers: [PDF Reader](#) | [MS Word Viewer](#) | [MS PowerPoint Viewer](#) | [MS Excel Viewer](#) | [WinZip](#)

<http://172.25.110.136:8080/ags/actions/PermissionAction?action=showLoginForm>



Federal Aviation  
Administration

# What Happens & When

- **Online tool mandatory after 3/31/2018 per FAA Order 5300.1G**
- **ADO/RO will generate .pdf of MOS out of tool for your records when MOS complete (will be similar to MOS form currently in use)**



# General Guidance on MOS Submittals

- **File a separate MOS for each specification, but may summarize a single specification's changes in one **change tracked** document.**
- **Include drawings and sketches with details.**
- **For use of a different material:**
  - Include a materials comparison;
  - State the test requirements for the standard and the tests of the material you propose to use;
- **Stick to facts. Avoid personal opinions.**
- **Avoid justifications without substance.**



# Use of State Highway Specifications

## 49 USC 47144

- **State Highway Specifications:**
  - Developed for highway loads not airport loads
  - May not seek AIP funds for rehabilitation or reconstruction for 10 years after construction (grant special condition)
  - May need to increase pavement layer thickness's  
See table A1-1 for amount of additional thickness  
(next slide)
- **Will require a MOS to utilize in accordance with FAA Order 5100.1**



**TABLE A1-1. MINIMUM PAVEMENT STRUCTURAL SECTIONS**

<b>Aircraft Gross Weight Category</b>	<b>Recommended State Standard Equivalent Pavement Sections When Using State Highway Materials and Specifications.</b>	
	<b>Asphaltic Concrete (AC) Pavements</b>	<b>Portland Cement Concrete (PCC) Pavements</b>
<b>12,500 and Under</b>	AC = FAA design thickness + $\frac{1}{4}$ " 50-blow Marshall equivalent	5" PCC Minimum compressive strength of 4,400 psi and minimum cementitious material content of 564#/CY
	Base = FAA design thickness +1"	4" Subbase
	Subbase = Thickness required to meet FAA design total thickness.	
<b>30,000 and Under</b>	AC = FAA design thickness + $\frac{1}{2}$ " 50-blow Marshall equivalent	6" PCC Minimum compressive strength of 4,400 psi and minimum cementitious material content of 564#/CY
	Base = FAA design thickness +1"	4" Subbase
	Subbase = Thickness required to meet FAA design total thickness.	
<b>60,000 and Under</b>	50-blow Marshall equivalent when tire pressure less than 100 psi. AC = FAA thickness +1"	FAA Design thickness based on 600 psi flexural strength.
	75-blow Marshall equivalent when tire pressure more than 100 psi. AC = FAA thickness + $\frac{1}{2}$ "	Minimum cementitious material content of 564#/CY
	Base = FAA design thickness +2"	4" Subbase
	Subbase = Thickness required to meet FAA design total thickness.	

# Where are we today?

- **Airports serving aircraft:**

- < 12,500 lbs and RW < 5000'
  - MOS is not required for use of State HWY specs since P-403, P-401 or P-501 is not required
- 12,500 lbs but < 60,000 and RW < 5000'
  - MOS required for materials for use of State HWY materials. See FAA Order 5100.1
- > 60K or RW > 5000'
  - Use of State HWY materials not allowed
  - MOS approval follow Order 5100.1



# Order 5300.1G Appendix A

Excerpt only:

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	

**File MOS early in the design phase (with PER)**



# For Help

- <https://airports-gis.faa.gov/public/MOSOnlineHelp/index.html>
- **Tim House, AR/OK Lead Engr, X5669**
- **Cynthia Diep, AR/OK Engr Specialist, X5672**
- **Andy Velayos, LA/NM Engr Specialist, X5647**
- **Frank Snell, TX Engr Specialist, X5698**
- **Todd Hebert, TX Engr Specialist, X5614**
- **Lana Logan, ASW Regl Engr, X5622**



# Resources:

- **FAA Order 5100.38C, “AIP Handbook”**
- **FAA Order 5300.1G, “Modification to Agency Airport Design, Construction, and Equipment Standards”**
- **Grant Assurances – March, 2005**
- **Sponsor Certification of Project Plans and Specifications**
- **FAA Southwest Region Modification of Airport Standards Form**
- **<https://airports-gis.faa.gov/public/MOSOnlineHelp/index.html>**



# Questions?

