# **New TOS Approval Mode**











• The ATD-2 Metroplex Planner can now support the coordination of TOS Approvals across multiple ATC facilities.





Clear

ZFW

DAL

Search

S\_13L\_13R

- Toggle buttons on the Toolbar are used to select which ATC facility Center or Tower – will approve TOS Submissions.
  - At **ZFW**, Toggle buttons are available on the Toolbar for <u>each airport</u>, DFW and Love Field.



• And, in the **DFW and Love Field Towers**, Toggle buttons are available for that airport.



- Both facilities the Center and the Towers can select either mode. The selected Approval Mode for each airport is reflected system-wide, at all facilities.
- Each morning, the system defaults to **<u>Tower</u>** Approval Mode at both airports.





- At each airport, only one facility Center or the Tower can be the active TOS Approver at a time.
- The green Toggle button indicates which facility is currently approving TOS Submissions.
  - In this example, if we "follow the green" for each set of airport buttons, we see:
    - Center is approving TOS Submissions made at DFW, and
    - Love Field Tower is approving TOS Submissions made at DAL.

Metroplex Planner - ZFW Toolbar										
TM Actions	Create	Show Window	TOS	Settings	Sea	arch		Clear		
NEW 2 DFW	NEW 2 DFW: TOS Approver CENTER 1623 S_Normal Tos							ZFW		
					DFW A Toggle E	Airport Buttons	DAL / Toggle	Airport Buttons		





### Let's look at two examples ...







- First, a TOS Submission at Love Field.
- Remember, we "follow the green" to know which facility is approving TOS Submissions. In this example, the DAL Tower is approving TOS Submissions made at Love Field.

Metroplex Planner - ZFW Toolbar ×										
TM Actions	Create	Show Window	TOS	Settings	Search	Clear				
NEW 2 DF	W:TOS Approv	er CENTER 1623	S_No	rmal Tos	DFW ZFW	DAL ZFW				
W Center Tool	bar									

	Metroplex Planner - DAL Toolbar ×										
TM Actions	Create	Show Window	Taxi List	TOS	Settings	Search		Clear			
NEW 1 TO	NEW 1     TOS Approver TOWER 1623     S_13L_13R     Tos     DAL     ZFW										
ava Field Towa	Toolbar										







 When a Flight Operator makes a TOS Submission at Love Field, the submission is indicated on the Timeline and in the TOS Departure Table at <u>both</u> the Center and DAL Tower facilities ...

Ν	Metroplex Planner - ZFW TOS Operations at 21:09 Z											
ix	Top CDR Top Rwy Top Top OFF Top IN Eligibility Coord State Flight Status											
	DALMC01S	13L	21:26	0	+9	Candidate		FO Submitted	So	heduled_Out		

	Metroplex Planner - DAL TOS Operations at 21:09 Z											
10	) Coord Sta	te = F	O Subm	itted								
<	Top CDR	Top Rwy	Тор ЕТОТ	Top OFF Delay	Top IN Delay	Eligibility State	Coord State		Flight Status			
	DALMC01S	13L	21:26	0	+9	Candidate	FO Submitted	Sc	neduled_Out			











• ... but, the pop-up Submission alert (the yellow box) is only displayed at the **Approving facility**, in this case, **Love Field Tower**.



#### **ZFW** Center

#### DAL Tower







• Likewise, the option to "**Approve**" the TOS Submission is available only at the **Approving facility**, again, in this case, **Love Field Tower**.

SWA30	DAL MCO THHOR 13	L35M T
	SWA30 TOS Elight Menu	
	Scratch Pad	
	Exclude from MIT	
	Change Runway 🔹 🕨	
	Change Departure Fix )	

ZFW TOS Operations at 21:10 Z

У	To ET	ор ТОТ	Top OFF Delay	Top IN Delay	Elig St	ibility tate	Coord State	Flight Status	_
	21:	26	0	±α	Candi	date	FO Submitted	Scheduled_Out	35
		2	SWA30	Monu		-			
		5	Scratch P	ad					
		E	xclude fr	om MIT					
l		0	Change R	unway	) . Eiv 1				

**ZFW Center** 

SWA	30 D M SWA30 Approv TOS FI Scrato Exclud	CO TH Ve ight Mer h Pad e from N	IHOR 13L	35M T	didate ETOT=21:20	5 DelaySavin	gs=-K
DAL TOS C	perations	s at 20:59	9 Z				Search
mitted							
mitted Top ETOT	Top OFF Delay	Top IN Delay	Eligibility State	Coord State 🔺	Flight Status	TMI Info	Scr
mitted Top ETOT	Top OFF Delay	Top IN Delay	Eligibility State	Coord State 🔺	Flight Status Scheduled_Out	TMI Info 35M	Scr
mitted Top ETOT 21:26 SW	Top OFF Delay /A30 prove	Top IN Delay	Eligibility State	Coord State ▲ FO Submitted O1S Candidate	Flight Status Scheduled_Out e ETOT=21:26 Del	TMI Info 35M aySavings=-L	Scr
mitted Top ETOT 21:26 SW TO Sci	Top OFF Delay /A30 prove S Flight I	Top IN Delay Menu	Eligibility State	Coord State A FO Submitted O1S Candidate	Flight Status Scheduled_Out e ETOT=21:26 Del	TMI Info 35M aySavings=-1	Scr
Top ETOT	Top OFF Delay /A30 prove S Flight I ratch Pac	Top IN Delay Menu J M MIT	Eligibility State	Coord State 🔺 FO Submitted O1S Candidate	Flight Status Scheduled_Out e ETOT=21:26 Del	TMI Info 35M aySavings=-1	Scr









- In the second example, a Flight Operator makes a TOS Submission at **DFW**.
- Again, we "follow the green" to know which facility is approving TOS Submissions. In this example, Center is approving TOS Submissions made at DFW.

	Metroplex Planner - ZFW Toolbar ×											
TM Actions Create Show Window TOS Settings Search Clear												
NEW 2 DF	W:TOS Approve	er CENTER 1623	S_No	rmal Tos	DFW ZFW	DAL ZFW						
ZFW Center Tool	lbar											

	Metroplex Planner - DFW Toolbar ×									
TM Actions	Create	Show Window	Taxi List	TOS	Settings	Search		Clear		
NEW 1 TO	S Approver CE	NTER 1623			S_No	rmal Tos	DFW	ZFW		
DFW Tower Tool	bar							-4->		







 When a Flight Operator makes a TOS Submission at DFW, the submission is indicated on the Timeline and in the TOS Departure Table at <u>both</u> the Center and DFW Tower facilities ...

Metroplex Planner - ZFW TOS Operations at 22:47 Z	Metroplex Planner - DFW TOS Operations at 22:44 Z
ligibility State != Expired	/:18L,DFW:36R,DFW:31R,DFW:31L AND Coord State = FO Submitted AND Eligibility State !=
Op IN belay     ETOT ▲     Time to Expiration     Top ETOT     Eligibility State     Coord State     Flight Status       8     03/04:02     8     23:41     Candidate     FO Submitted     Scheduled_Out     35M	TMI In     Top OFF     Top IN     Time to Delay     Top Expiration     Top ETOT     Eligibility State     Coord State     Flight Status       17     0     +48     11     23:41     Candidate     FO Submitted     Scheduled_Out
ENY3402 DFW BUF ZERLU 17R 35N T	ENY3402 BUF ZERLU 17R 35N T









• ... but, the pop-up Submission alert (the yellow box) is displayed only at the **Approving facility**, in this case, at **Center**.



#### ZFW Center

#### **DFW** Tower







• Likewise, the option to "**Approve**" the TOS Submission is available only at the **Approving facility**, again, in this case, at **Center**.

ENYS	3402 DFW	BUF ZERL	U 17R 35M	Т		
		ENY3402 Approve TOS Flight Me Scratch Pad	) DF	WBUF1S Potentia	ETOT=23:42	DelaySavings=
Planner - 2	FW TOS Ope	Exclude from erations at 22:4	Fix Closure			- 1
te != Expir	ed					Search 6
T 🔺 Ti Exp	me to Top piration ETO	Eligibility T State	Coord State	Flight Status	TMI Info	Scratch Pad
2 8	ENY3402	Candidate	EQ Submitted	Scheduled_Out	35M FixClsd	
	Approve		DFWBUF15	Candidate ETOT=2	3:41 DelaySa	vings=-26
	TOS Flight Scratch P Exclude fr	Menu ad om Fix Closure				

**ZFW Center** 

		2 00	L TEKTI									
			EN	/3402								
			то	S Flight Menu								
			Scr	atch Pad								
			Exc	lude from Fix Clos	sure							
			Exc	lude from MIT								
			Cha	ange Runway	•							
_												
ex Planner -	- DE	N TOS	Operations a	t 22·44 7								
		1105	operations a									
260 DEW	210											
. 301, 01 11.		DEM-3	11 AND Coord	d State — EO Sub	mitted AND Eligibility							
	511,	DFW:3	1L AND Coord	d State = FO Sub	mitted AND Eligibility							
Time to	. III,	DFW:3	L AND Coord	d State = FO Sub	mitted AND Eligibility							
Time to Expiration	on	DFW:3	IL AND Coord Eligibility State	d State = FO Sub Coord State	mitted AND Eligibility Flight Status							
Time to Expiratio	o on	Top ETOT	IL AND Coord Eligibility State	d State = FO Sub Coord State	Flight Status							
Time to Expiration	on E	DFW:33	Eligibility State	Coord State	Flight Status							
Time to Expiration	on El	DFW:33	Eligibility State	Coord State	mitted AND Eligibility Flight Status Scheduled_Out							
Time to Expiration	on El Ti	DFW:3 Top ETOT 23:41 NY3402 OS Flig cratch	LL AND Coord Eligibility State Candidate ht Menu Pad	Coord State	mitted AND Eligibility Flight Status Scheduled_Out							

**DFW** Tower

Exclude from MIT



### TOS Submission/Approval Time Limit in Center Approval Mode



- When in **Tower** Approval mode:
  - A TOS "Candidate" route can be submitted and approved until departure.
- When in **Center** Approval mode:
  - The option to submit or approve a TOS "Candidate" route "expires" at a set time, 35 minutes prior to p-time.



### TOS Submission/Approval Time Limit in Center Approval Mode



In the "Time to Expiration" column, a timer counts down (in minutes) to the expiration time. When the timer reaches 0 min (at 35 min prior to p-time), a "Candidate" route expires and TOS Eligibility State changes to "Expired".

	Flight Operator - AAL Toolbar ×											×							
TM Actions	Create	Sho	w W	'indov	V T	axi List	TOS		Settir	ngs	Search	Cl	ear	Flight C	perator - AAL T	OS Operatio	ns at 0	1:40 Z	
NEW 1 TOS	TOS Approver CENTER 1623 S_Normal TOS DFW ZFW																		
	🝸 📰 🛅 🖺 TOS Departure - Eligibility State = Candidate AND Eligibility State - Expired																		
	Fligh	it ID	CPE	Rwy	Dest	Route of Flight	: Dep Fi	OFF Delay	IN Delaj	у ЕОВТ	ETOT	POBT	Time to Expiration	✓ Eligibility State	Coord State	Top CDR	Top Rwy	Тор ЕТОТ	
	AAL22	22	E	17R	DCA	KDFW.TR.	. TRRCH	+155	+134	03/02:29	03/05:16	03/02:29	14	Candidate	Not Submitted	DEWDCA1S	17R	02:41	
	AAL16	94	E	18L	DEN	KDFW.LO.	. LOWGN	+54	+34	03/02:20	03/03:27	03/02:20	5	andidate	Not Submitted	D			
	AAL18	83	E	17R	MSY	KDFW.MR.	THHOR	+147	+122	2 03/02:20	03/04:59	03/02:20	5	Candidate	Not Submitted		mi	autor	a in tha
	AALZZ	00		1/1	MIA	KDFW.MR.		+130	+12/	03/02:20	03/05:10	03/02:20	5	andidate	Not Submitted		11111	nutes	
	9				то	5 Departu	ıre - Eliai	bility S	tate =	Expired						🗌 "Tim	ne to	o Exp	oiration"
	<b>.</b>	0	-					, .								aalu			
																	m	, IU	
	Fligh	it ID	СРЕ	Rwy	Dest	Route of	Dep Fix	OFF	IN	EOBT	ETOT	РОВТ 🔺	Time to	Eligibility	itate	Stat	<u>م</u> ما	hand	es to
				-		Flight		Delay	Delay				Expiration	State				lang	63 10
	AAL1 6	15	Y E	17R	BWI	KDFW.T	TRRCH	+9	-5	03/01:54	03/02:17	03/02:00	0	Expired	Not Submitted	"Ex	nire	d"	
	ENY34	91	E	17R	GSP	KDFW.F	HANUH	+4	-34	03/01:55	03/02:11	03/02:00	0	Expired	Not Submitted			ч.	
	AAL14	46	Y E	17R	TUL	KDFW.G	GRABE	+17			03/02:30	03/02:00	0	Expired	Not Submitted				
	ENY34	09	E	17R	GRR	KDFW.A	AKUNA	+22	+5	03/01:58	03/02:35	03/02:00	0	Expired	Not Submitted				
	ASH5:	/80	E	17R	PNS	KDFW.M	THHOR	+31	+25	03/01:57	03/02:40	03/02:00	0	Expired	Not Submitted				
	_		-						-								-		1



#### TOS Submission/Approval Time Limit in Center Approval Mode



• Once a "Candidate" route has expired, it cannot be submitted by the Flight Operator or Approved by either facility.

				×				bar	- AAL Tool	ight Operator	Fli		
perations at 02:17 Z	perator - AAL TOS	Flight C		Clear	earch	Se	ettings	5	TOS	xi List	/ Ta	w Window	reate Sh
				FW <b>ZFW</b>	TOS	S_Normal						1623	rover CENTE
						_	_	_	_	_	_	_	_
		d	e != Expire	igibility Stat	ate AND Eli	- Candid	tate =	bility S	ıre - Elig	5 Departu	тоя		7 🐺 🛙
p CDR Top Rwy ETOT	Coord State	Eligibility State	Time to Expiration	POBT	ETOT	у ЕОВТ	IN Dela	OFF Dela	Dep Fi	Route of Flight	Dest	CPE Rwy	Flight ID
MLU1S 17R 03:11	Not Submitted DF	Candidate	3	03/02:55	03/05:21	03/02:55	+113	+133	THHOR	KDFW.MR.	MLU	E17R	ENY3713
					1	Expired	tate =	ibility S	ıre - Elig	o Departu	тоя		7 🖷 [
Once <b>Expire</b> "Submit" is n	Coord State	Eligibility State	Time to Expiration	POBT A	ETOT	Expired	itate = IN Delay	OFF Delay	Dep Fix	B Departu Route of Flight	<b>TOS</b>	CPE Rwy	Flight ID
Once <b>Expire</b> "Submit" is n longer availa	Coord State	Eligibility State Expired	Time to Expiration	POBT ▲ 03/02:00	ETOT 03/02:29	EOBT	IN Delay	OFF Delay	Dep Fix	Route of Flight	Dest	CPE Rwy	Flight ID
Once <b>Expire</b> "Submit" is n longer availa	Coord State	Eligibility State Expired Expired	Time to Expiration 0	POBT	ETOT 03/02:29 03/02:40	EOBT <b>03/01:58</b> 03/01:54	IN Delay -3 -4	OFF Delay +12 +23	Dep Fix	Route of Flight KDFW.A	Dest	CPE Rwy 17R 17R 17R	Flight ID           ENY3409           ENY3325
Once <b>Expire</b> "Submit" is n longer availa the right-click	Coord State ENY3409 TOS Flight Menu	Eligibility State Expired Expired Expired	Time to Expiration 0 0	POBT ▲ 03/02:00 03/02:00 03/02:00 03/02:00	ETOT 03/02:29 03/02:40 03/02:57	EOBT <b>03/01:58</b> 03/01:54 03/01:57	IN Delay -3 -4 +30	0FF Delay +12 +23 +39	Dep Fix Dep Fix AKUNA HANUH ZERLU	Route of Flight KDFW.A KDFW.F	Dest GRR SAV CVG	CPE Rwy	Flight ID ENY3409 ENY3325 ENY3886
Once <b>Expire</b> "Submit" is n longer availa the right-click	Coord State ENY3409 TOS Flight Menu Scratch Pad	Eligibility State Expired Expired Expired Expired	Time to Expiration 0 0 0	POBT ▲ 03/02:00 03/02:00 03/02:00 03/02:00	ETOT 03/02:29 03/02:40 03/02:57 03/02:18 03/02:52	EOBT 03/01:58 03/01:54 03/01:57 03/01:54	IN Delay -3 -4 +30 -23	0FF Delay +12 +39 +1	Dep Fix Dep Fix AKUNA HANUH ZERLU AKUNA	Route of Flight KDFW.A KDFW.F KDFW.Z KDFW.A.	Dest GRR SAV CVG SGF	CPE Rwy 17R 17R 17R 17R 17R 17R	Flight ID ENY3409 ENY3825 ENY3886 ENY3606 ENY3606
Once <b>Expire</b> "Submit" is n longer availa the right-click	Coord State ENY3409 TOS Flight Menu Scratch Pad Exclude from TOS	Eligibility State Expired Expired Expired Expired Expired	Time to Expiration 0 0 0 0	POBT ▲ 03/02:00 03/02:00 03/02:00 03/02:00 03/02:00	ETOT 03/02:29 03/02:40 03/02:57 03/02:18 03/02:52	EOBT 03/01:58 03/01:54 03/01:57 03/01:54 03/01:54 03/02:22	IN Delay -3 -4 +30 -23 +49	OFF Delay +12 +23 +39 +1 +27	Dep Fix AKUNA HANUH ZERLU AKUNA AKUNA	Route of Flight KDFW.A KDFW.F KDFW.Z KDFW.A KDFW.A	Dest GRR SAV CVG SGF PIT	CPE Rwy 17R 17R 17R 17R 17R 17R 17R 17R	Flight ID ENY3409 ENY3325 ENY3886 ENY3606 AAL403
Once <b>Expire</b> "Submit" is n longer availa the right-click	Coord State ENY3409 TOS Flight Menu Scratch Pad Exclude from TOS Change Parking C	Eligibility State Expired Expired Expired Expired Expired	Time to Expiration 0 0 0 0	POBT ▲ 03/02:00 03/02:00 03/02:00 03/02:00 03/02:00	ETOT 03/02:29 03/02:40 03/02:57 03/02:18 03/02:52	EOBT 03/01:58 03/01:54 03/01:57 03/01:54 03/02:22	IN Delay -4 +30 -23 +49	OFF Delay +12 +23 +39 +1 +27	Dep Fix AKUNA HANUH ZERLU AKUNA AKUNA	Route of Flight KDFW.A KDFW.F KDFW.A KDFW.A	Dest GRR SAV CVG SGF PIT	CPE Rwy 17R 17R 17R 17R 17R 17R 17R	Flight ID ENY3409 ENY3325 ENY3886 ENY3606 AAL403



### No TOS Submission/Approval Time Limit in Tower Approval Mode

 In Tower Approval Mode, TOS routes do not expire. Instead of a countdown timer, "N/A" is displayed in the "Time to Expiration" column.







### A few quick notes ...







 Flight Operators (and D10) have a TOS Approver <u>Status Indicator</u> on their Toolbar for awareness. These are for information only and are <u>not</u> selectable. Only the **Center** and the **Towers** have selectable buttons and can actually change the TOS Approval Mode.

			Flight Operator	- AAL Toolbar			×		
TM Actions	Create	Show Window	Taxi List	TOS	Settings	Search	Clear		
NEW 11 TO	S Approver TO	OWER 0223			S_N	lormal Tos	DFW ZFW	←	AAL I OOIDar:
									Status mulcator
			Flight Operator	- ENY Toolbar			×		
TM Actions	Create	Show Window	Taxi List	TOS	Settings	Search	Clear		
NEW 54 TO	S Approver TO	DWER 0916			S_N	lormal Tos	DFW ZFW	←	ENY Toolbar:
									Status Indicator
			Flight Operator	- SWA Toolbar			×		
TM Actions	Create	Show Window	Taxi List	TOS	Settings	Search	Clear		
NEW 1 TO	S Approver CE	NTER 0340			s.	_13L_13R Tos	DAL ZFW	←	SWA Toolbar:
-									Status Indicator





 After selecting a Toggle button (at Center or in the Towers), the Toggle buttons may both turn gray for a few seconds while the system is responding. Do not make any additional Toggle inputs.

Metroplex Planner - DFW Toolbar     x       TM Actions     Create     Show Window     Taxi List     TOS     Search     Char       NONE     S_Normal     ToS     DFW     ZFW	]←	To change the mode, the "ZFW" button is selected.
Metroplex Planner - DFW Toolbar       x         TM Actions       Create       Show Window       Taxi List       TOS       Search       Clear         NONE       S_Normal       Tos       DFW       ZFW	]←	Buttons are <i>momentarily</i> grayed-out.
Metroplex Planner - DFW Toolbar       ×         TM Actions       Create       Show Window       Taxi List       TOS       Search       Clear         NEW 1       TOS Approver CENTER 0407       S_Normal       Tos       DFW       ZFW 1	]←	Selected button turns green.





• At **Center** and **in the Towers**, ensure that the Visual Alerts box is checked on the "TOS Alerts" tab to display the TOS Submission pop-up alerts.









 Each morning, or any time the system restarts, the default TOS Approval Mode for both airports is the <u>Tower</u>.

Metroplex Planner - ZFW Toolbar												
TM Actions Create Show Window TOS Settings	Clear											
NEW 1 DFW: TOS Approver TOWER 0300 S_Normal TOS	<b>DFW</b> ZF	W DAL ZFW										
	1	1										





• If TOS Submissions are changed from Active to Inactive, both buttons (along with the TOS icon) are grayed-out.

Runway Utilization	APREQ Schedules MIT
TOS Submiss O Active Inactive	rExcluded Destinations (Al Airport:
CDP Postrictions	

		×							
TM Actions	Create	Show Window	Taxi List	TOS	Settings	Search		Clear	
NEW 1 TOS	NEW 1 TOS INACTIVE 0311 5_Normal 5								
						1			