NOTICE

U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
Air Traffic Organization Policy

N JO 7210.832

Effective Date:
January 30, 2013

Cancellation Date:
August 22, 2013

SUBJ: Traffic Management Advisor (TMA)

1. Purpose of This Notice. This notice outlines procedures for issuing air traffic control clearances, releases, and departure restrictions and defines duty responsibilities of entities involved in metering the National Airspace System (NAS). TMA is the technology and methods used for adjusting demand/capacity imbalances at select core airports, departure fixes, and points across the NAS. This change provides specific directions to facilities as to where to publish display requirements for TMA metering lists, and/or data block information.

2. Audience. This notice applies to all FAA air traffic control facilities.

3. Where Can I Find This Notice? This notice is available on the MyFAA employee Web site at https://employees.faa.gov/tools_resources/orders_notices/ and on the air traffic publications Web site at http://www.faa.gov/air_traffic/publications/.

4. Procedures. Add the following paragraphs to FAA Order JO 7210.3:

6-1-7. DISPLAY OF TRAFFIC MANAGEMENT ADVISOR (TMA) INFORMATION

Configure TMA delay information for single-center metering (SCM) or adjacent-center metering (ACM) to display TMA schedule information on the main display monitor (MDM).

Section 24. Traffic Management Advisor (TMA)

17-24-1. PURPOSE

This section establishes procedures and responsibilities for the use of Traffic Management Advisor (TMA).

17-24-2. DEFINITIONS

a. *Adjacent Center Metering (ACM)*. An extension of SCM that provides time-based metering capability to neighboring facilities. There are three categories of ACM processing and control at a facility:

1. Controlling facility – The TMA unit that exercises control over SCM and/or ACM settings and the relevant metering operation.

2. Limited Control - The ability to manage specific ACM settings and activities for relevant metering operations.

3. Non-Controlling - A facility that only has monitoring capability.

b. *Coupled Scheduling*. An automation process that adds additional meter-points and allows the linking of time-based flow management (TBFM) systems. This results in more optimal balancing and distribution of delays over a greater distance from the airport or meter point.

c. *En Route Departure Capability (EDC)*. A functionality within TMA that assists TMCs in formulating release times to adapted meter points in space.

d. *Metering*. A method of controlling aircraft demand by scheduling the time at which each aircraft should cross a predetermined fix.

e. *Rippling*. The recalculation of TMA-generated, frozen scheduled times of arrival (STA) resulting from a manual action at the controlling graphical user interface (GUI). Rippling, also commonly referred to as "rescheduling" or "reshuffling," can be executed independently but is normally associated with changes to TMA configurations or settings.

f. *Single Center Metering (SCM)*. An application of the TMA tool that provides TMCs with the ability to view and manage arrival flows to an ARTCC's internal airports.

g. *Time-Based Flow Management (TBFM)*. The technology and methods of balancing demand and capacity utilizing time.

h. *Traffic Flow Management (TFM)*. The processes and initiatives a TMC uses to balance air traffic demand with system capacity.

i. *Traffic Management Advisor (TMA)*. A comprehensive, automated method of planning efficient arrival trajectories from cruise altitude to the runway threshold.

17-24-3. RESPONSIBILITIES

a. The ATCSCC must:

1. Be the final decision authority for TMA-related operations and initiatives.

2. Manage the equity of overall system delays throughout the NAS.

3. Host/participate in ACM discussions and support all ACM and other time-based metering initiatives. Collaborate on an exit strategy when ACM is no longer required.

4. Include the status of any pertinent TMA-related information on the planning telecons and on the Operational Information System (OIS).

5. Prioritize TBFM activity based on NAS and/or facility constraints.

6. Inform impacted facilities of relevant information that would influence arrival metering decisions or en route EDC operations.

7. Establish and maintain multi-facility communications when necessary for ACM operations.

8. Log ACM events and other TMA activities as appropriate in the NTML.

9. Serve as a repository for TBFM information and TMA reference materials.

b. All TMUs with controlling TMA systems must:

1. Determine appropriate TMA settings.

2. Ensure TMA settings are entered, current, and coordinated.

3. Monitor TMA to determine metering timeframes and coordinate start/stop times and reportable delays with the ATCSCC and affected facilities.

4. Communicate meter start/stop information to operational areas, operating positions, and participating facilities, and enter into NTML as necessary**.**

5. Enable sector meter list as coordinated.

6. Monitor internal facility metering delays and initiate actions, as appropriate, when values exceed or are projected to exceed delays that can be absorbed by control sectors. Notify the FLM or affected areas/sectors of actions taken and expected outcomes.

7. Monitor multi-metering scenarios. Advise ATCSCC if time based metering (TBM) to multiple airports or fixes is impacting or projected to impact sector or facility level operations.

8. Coordinate changes to the metering plan or updates to the TMA schedule with the affected facilities.

9. Coordinate internally with affected areas and with any ACM supporting facilities before taking action to update the TMA schedule.

10. To the extent possible, avoid making any changes in TMA that cause a global schedule change (rippling) during metering operations. Advise affected facilities and sectors before rippling.

NOTE-
Coordinate and disable the sector meter list when rippling is necessary. Enable the metering list when rippling is complete.

11. Use TMA to determine release times for internal departures to a metered airport.

12. Monitor arrival and departure flows for potential metering actions/changes.

13. Monitor internal and adjacent facility metering compliance and take appropriate action.

14. Coordinate and disable sector meter list when metering times are no longer in effect.

c. Supporting TMUs performing ACM or coupled scheduling must:

1. Determine appropriate local TMA settings.

2. Ensure TMA settings are entered, current, and coordinated.

3. Coordinate with controlling facility and ATCSCC, as appropriate.

4. Communicate meter start/stop information to operational areas, operating positions, and participating facilities.

5. Enable sector meter list as coordinated.

6. Use TMA to determine release times for internal departures to a metered airport.

7. Monitor arrival and departure flows for potential metering actions/changes.

NOTE-
Coordinate and disable the sector meter list when rippling is necessary. Enable the metering list when rippling is complete.

8. Monitor internal and upstream compliance.

9. Disable the sector meter list when metering has been completed.

6. Distribution. This notice is distributed to the following ATO service units: Terminal, En Route and Oceanic, Mission Support, and System Operations; the Office of ATO Safety and Technical Training; the Air Traffic Control System Command Center, the Air Traffic Safety Oversight Service; the William J. Hughes Technical Center; and the Mike Monroney Aeronautical Center.

7. Background. One of the first steps in the Joint Planning and Development Office's (JPDO) plans for the Next-Generation Air Transportation System (NextGen) and the OEP Flight Plan objectives is to develop and deploy a versatile, nationwide, time-based metering capability. JPDO and OEP plans

document and end-to-end time based flow management system that provides a more efficient alternative to today's miles-in-trail restrictions and ground stops. TMA is a comprehensive, automated method of planning efficient arrival trajectories from cruise altitude to the runway threshold. TMA increases situational awareness through its graphical displays, timelines, and load graphs. TMA trajectories are optimized for each aircraft to permit an accurate estimated time of arrival at an airport and provide scheduled times of arrival (meter times) that optimize the flow of traffic into a terminal area. Now that Phase 1 of the TMA development is complete, planning for the next generation of TBFM has begun. Phase 2 will include additional TMA airports, improve the functionality of TMA in support of adjacent center metering (ACM), TRACON metering, enhanced departure capability, and point-in-space metering.

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December 10, 2012
Date Signed