FAA Facts

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Current Topics: Minneapolis-St. Paul International Airport (MSP)

See Our Companion Video for a Visual Presentation of RNAV STARs at MSP

RNAV STARs: Enabling Efficiency

The Minneapolis St. Paul International Airport (MSP) is the home of more than 400,000 take-offs and landings per year. Air traffic procedures at MSP are continually being updated for improved efficiency and enhanced safety.

RNAV STAR (Standard Terminal Arrival) procedures came to MSP in March of 2015. These published arrival routes increase safety by simplifying arrival paths at certain airports by creating repeatable and predictable arrival paths. This consistency reduces miles flown, fuel consumption and carbon emissions.

Pilots follow the arrival paths using the automation in the aircraft the same way the driver of a car follows route directions using a GPS. The STARs also simplify and decrease controller and pilot workload by using automation to reduce the number of radio transmissions.

MSP air traffic controllers use STARs to provide more efficient services to pilots in the airspace immediately surrounding the airport. These services include separating and sequencing air traffic, providing conflict and terrain avoidance alerts, weather advisories, and radar vectors for departing and arriving traffic.

The STARs technology is part of the FAA's NextGen program, which transfers air traffic control from ground-based radar to satellite guidance. NextGen benefits include enhanced safety, efficiency and reduced delays.

STARs at MSP

The initial STARs procedures were studied and approved by a working group of air traffic controllers and pilots before they were implemented in March 2015.

Several months later, we brought the same group together to see how these procedures were working. We focused on the safety of the operation, which is the FAA's number one concern, as well as efficiency, capacity and the overall fly-ability of the routes.

Out of this review, the FAA working group recommended several adjustments designed to smooth out different legs and turn points. Most of these adjustments were made many miles

away from MSP, but some were made closer to the airport. Many were made at high altitudes – 8,000 feet and above.

These adjustments improve the efficiency of arrival and departure streams, smoothing the flow of traffic for pilots and controllers. More than 90 percent of the aircraft that fly into MSP use these procedures.

It's important to note that these adjustments are still being studied and further adjustments may be made. The adjustments are expected to be finalized by early next year.

Community Outreach

Community involvement is vitally important. Throughout this process, the FAA provided regular updates to the Metropolitan Airports Commission (MAC) and the Noise Oversight Committee (NOC). MAC representatives have been invited to all design discussions and have helped the FAA by providing data and insight into what is most important to their constituents, as well as what changes would provide the least negative impact to the surrounding areas.

We also want to share information with the citizens of the Minneapolis and St. Paul metropolitan area. See our website for the latest on this project, and other air traffic news from MSP:

http://www.faa.gov/nextgen/communityengagement

Be sure to see our companion video for a visual representation of how the MSP RNAV STARs procedures look today.

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