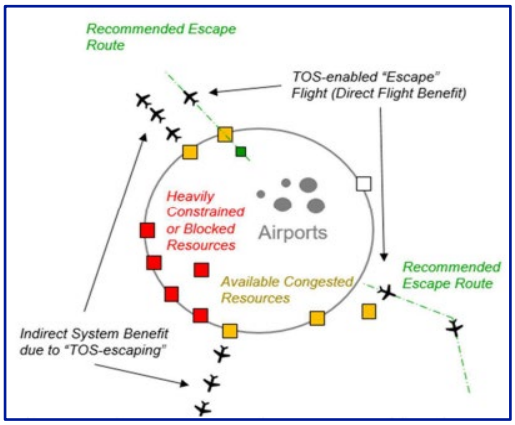
ATO | 2023 Focus Five | Efficiency Initiatives

The National Airspace System (NAS) is the safest, most efficient aerospace system in the world.
While safety is always our primary concern, efficiency maximizes the use of available airspace. The overarching goal of these performance initiatives is to increase efficiency without compromising safety and ultimately reduce delay wherever possible.

Continuously reviewing system performance to proactively identify gaps in system efficiency allows for collaborative, data-based analysis that creates effective solutions and drives actionable change.

Trajectory Option Set (TOS)

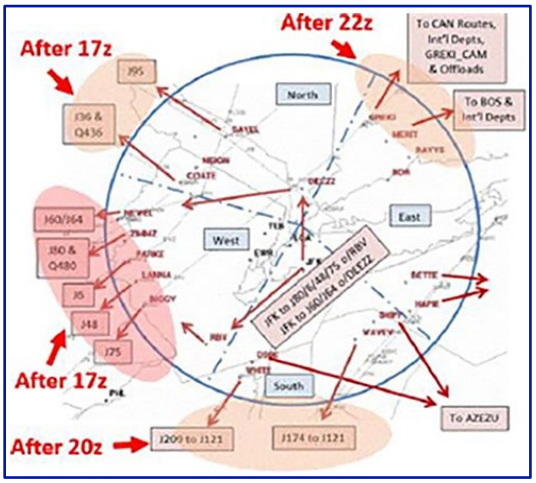
Trajectory Option Set (TOS) will be a key component of reducing taxi-out delays and gate returns during adverse weather conditions in the years to come. TOS allows flight operators the ability to submit alternate route options, in order of preference, to enable a more flexible and dynamic solution for Traffic Flow Management (TFM) issues. This new capability will streamline the coordination and decision making process and ultimately increase efficiency/throughput in the NAS.



In 2022, the Collaborative Decision Making (CDM) Flow Evaluation Team (FET) conducted table top exercises at the Washington Air Route Traffic Control Center (ZDC). This effort proved fruitful as the airlines demonstrated their readiness for this new capability. This coming year, Air Traffic Services (AJT) and System Operations (AJR) will partner to fully deploy TOS capabilities at ZDC. The lessons learned and experience gained will help us further deploy TOS throughout the rest of the NAS.

Together, the ATO and industry will share in the execution of impact management strategies for tactical and strategic route planning. Success of this initiative will be predicated on the number of Industry submissions, and ATO issued Trajectory Option Sets.

Departure Throughput

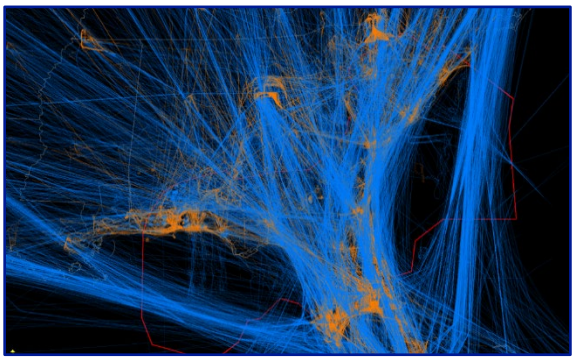


Departure delays out of the New York metropolitan area have a ripple effect on efficiency throughout the NAS. This initiative will target specific TMIs that lead to delays out of New York (i.e. the reduction of the most impactful Mile-in-Trail (MIT)), and increase the use of techniques that lead to improved throughput (i.e. escape route utilization and departure gate balancing). Although the main focus will be on NY, other constrained airports across the country will be studied for efficiency gains.

Industry will play an important role in the success of this initiative by developing procedures/guidelines for dispatchers, educating them on the value of using delay saving alternate route options when Traffic Management Initiatives are in place. The goal for this initiative is to ensure that as traffic levels continues to increase, the improved NY3 departure performance achieved through the 2018-19 VP+1 initiatives is not lost.

Airspace Throughput

Enroute airspace bottleneck issues is a consistent problem facing FAA facilities and is a major concern for our Industry partners. Addressing airspace throughput issues may bring savings in both time and cost for our stakeholders but, more importantly, will reduce complexity and enhance safety through saturated airspace.



This effort will focus on the throughput into and out of the Florida markets and will have three major thrusts. First, escape route utilization and compliance will be tracked and measured. Second, post operational AFP rate analysis will be performed to ensure appropriate sector throughput was achieved. Finally, the ATO will continue the analysis started this past year on baselining AFP rates so they are less subjective and more data driven.

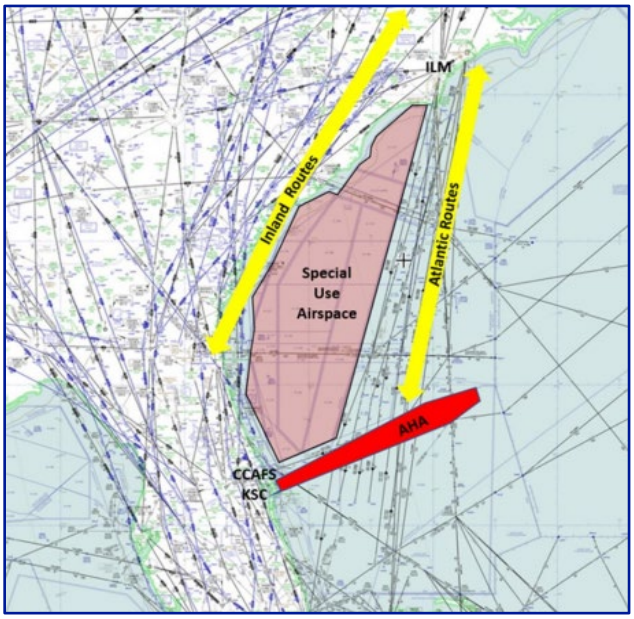
Although the main focus will be on Florida throughput, we will also look for opportunities across the NAS to improve airspace throughput to include updating TFMS adaptation with respect to ascent/descent profiles that affect Monitor Alert Parameters (MAP).

MIT Impacts

For the past four years, the FAA has included MIT Stringency as one of its Focus Five initiatives. There is now a greater awareness into the appropriate use of MIT within each District in the NAS. Coupled with educational efforts towards Capping/Tunneling and Arrival Fix Balancing, the NAS has appreciated a significant reduction of unnecessary restrictions.

There is still room to improve upon the effects MIT has on the NAS and aircraft operators. This 2023 effort will address the concerns Industry has with MIT restrictions that generate the most impact on our stakeholders. This deeper and more granular approach to MIT analysis will tie into both airport and airspace throughput, with the goal to report out on the overall impacts of MIT restrictions by the end of the year. Specifically, we will measure impacts resulting from TMIs that result in departure delays and additional miles flown and make strategic improvements where feasible in the most constrained areas.

Space Ops



As we move into 2023, Space Operations are increasing in cadence and presenting challenges to integrate with other NAS operations. With multiple launch locations in use, there is a need to evaluate and address the equal roles for aircraft operators and launch companies.

This initiative will focus on the efficiency of airspace usage and the integration challenges of space operations along the eastern seaboard. The ATO will report out on the impacts of these operations to include: Space Ops related TMI utilization/cancellation and the return of normal route structure post launch/scrub, the efficiency of space operators launching within the first 10 minutes of their departure window, the estimated increase in average flight time and extra miles flown by affected aircraft. Aircraft operators will develop education for pilots and dispatchers on the importance of re-routing aircraft back on ARs, when feasible, to improve throughput in congested airspace once operations are complete.

Through CDM and joint education of the parties involved, the expectation is to move towards a dynamic environment of efficiently utilizing available airspace and minimizing the impacts of space operations.