

## AFP Concept

Airspace Flow Programs (AFP) will be introduced in Summer 2006 and mark a significant new step in enroute traffic management. The principal goal for the initial deployment will be to provide enhanced en route traffic management during severe weather events. An AFP is a traffic management process that identifies constraints in the enroute system, develops a real-time list of flights that are filed into the constrained area, and distributes expected departure clearance times (EDCT) to meter the demand through the area.

If an AFP is issued and a flight is included, the pilot will receive an expected departure clearance time (EDCT). Meeting the departure time is important because it allows traffic managers to properly meter flights through the constrained area being controlled by the AFP.

When an AFP is issued the FAA will send an Advisory that is accessible at <http://www.fly.faa.gov/adv/advAdvisoryForm.jsp>.

The AFP will also appear on the Operational Information System (OIS) page at <http://www.fly.faa.gov/ois/>.

At airports with an airport traffic control tower, controllers will provide you with the EDCT when you call for your clearance. If you are departing an airport without a control tower, you can determine if your flight has an EDCT. You may visit the ATCSCC's website at <http://fly.faa.gov> to determine if your flight has an EDCT. This website will provide information regarding the location and reason for an AFP. It will also provide a "Look Up" function to determine if your flight has received an EDCT.

It is important for you to check the ATCSCC website - before you depart - to determine if your flight is included in an AFP. Depending on the severity of the constraint leading to AFP, you may:

- be assigned airborne holding to provide the delay necessary for your flight to arrive; or
- be rerouted to avoid the AFP altogether; or
- need to land to absorb the delay; or
- be allowed to enter the AFP with minimal delay.

You have a window of time in which to depart and not miss the EDCT. Flights are asked to depart as close to the time as possible. If conditions warrant, you may depart 5 minutes before the EDCT and up to 5 minutes after. Outside of that window, you can exercise the following options:

- If your company is a CDM member, flight operations have a process for contacting the ATCSCC to request a new time.
- At airports with a control tower, the controller has a process for requesting a new time and can assist you.

- At airports without a control tower, you may:
  1. Contact Flight Service.
  2. Contact the overlying ARTCC or TRACON.

If you prefer to explore other options rather than the assigned delay, you may be able to:

- Route out of the AFP. If there is another acceptable route available that would take the flight out of the AFP, you may choose to refile the flight plan.
- Make a stop enroute. You may elect to land at an intermediate airport to provide the delay necessary for the flight to arrive at the AFP controlled time of arrival.

If you file a new flight plan into an existing AFP, the flight will be treated as a popup. Your flight will be assigned an EDCT consistent with the delay received by other flights filed to enter the AFP at about the same time.

If you file a flight plan out of an AFP and into another, the flight will be treated as a popup. Your flight will be assigned an EDCT consistent with the delay received by other flights filed to enter the AFP at about the same time. In addition, you will forfeit the arrival slot in the original AFP.

If your flight is included in both an airport ground delay program and an AFP, the EDCT for the ground delay program will take precedence.

It is recognized that the predicted demand through an AFP and the weather impacting the area may change substantially over time. When the conditions warrant, traffic managers will take steps to coordinate and implement revisions to the AFP. In a revision, AFP entry slots are recomputed so that demand is again metered to meet capacity and new EDCTs are sent to the enroute centers, control towers, and customer flight operations centers.

The AFP capability is a fundamental change to traffic flow management, and successful implementation will necessitate automation changes to ETMS and FSM for both the FAA and NAS users. It is imperative for NAS users to understand the impact of these changes on the data they see and on the automation systems. It is incumbent on the users to read Federal Aviation Administration Air Traffic Control System Command Center, Ground Delay Program, and Substitution Message Processing, Version 2.4 to determine any consequences on their automation systems, and be ready to operate with those changes in time for the deployment of ETMS 8.2, currently targeted for release in Summer 2006. This and other more comprehensive documents concerning GDP and AFP issues can be found at: <http://www.fly.faa.gov/NASDOCS/nasdocs.html>.

### **General Frequently Asked Questions**

1. Q: Who will implement AFPs and coordinate all AFP decisions?

A: The newly created NESP (National Enroute Spacing Position) at the ATCSCC will have oversight responsibilities for all AFPs.

2. Q: How were the boundaries for the six AFPs (FCAA01-A06) decided?  
A: For the initial AFP season, six AFPs have been defined to generally correspond to ARTCC boundaries, filtered for flights arriving to specific destination centers. By using these ARTCC boundaries, field facilities and customers will be able to identify which flights are included in the AFP, and what routes would be required to reroute out of an AFP. Also, when ground stops are necessary, tier based ground stops that transition into EDCT program revisions will produce more consistent values. After initial implementation, it is anticipated that the use of AFP will be expanded beyond the original six to allow traffic managers greater flexibility in applying the tool.
3. Q: In what weather scenarios do we expect to use the six predefined AFPs (FCAA01-A06)?  
A: The anticipated weather scenarios will include lines or popcorn storms in the NY Metro/Boston areas, in the Ohio Valley or ZDC ARTCC, and/or the DC Metro region. The forecast should also include CCFP (collaborative convective forecast product) predictions of medium to high confidence in areas with greater than 50% coverage. After initial implementation, it is anticipated that the use of AFP will be expanded for use not only in weather scenarios but also in high air traffic demand scenarios. This will provide traffic managers with an additional tool to manage geographic areas that experience periods of complex, high volume traffic.
4. Q: How is the AFP Arrival Rate (AAR) set?  
A: Based on the anticipated conditions, the NESP will select an arrival rate based on guidelines developed through analysis of historical data. These guidelines will be refined over time. When 'ad-hoc' AFPs are developed, the AAR may be a set number of aircraft allowed to pass through the FCA per hour or may be a percent reduction of known demand.
5. Q: What happens if my flight has an AFP EDCT, but is caught in an airport ground stop?  
A: The ground stop has the higher priority. If the ground stop is lifted and the AFP is still in place, the flight will get a new EDCT for the AFP along with a control type of RCTL (re-control). If the number of RCTL flights disrupts the delivery of the AFP, the NESP may elect to revise the AFP after the ground stop ends.
6. Q: Will the Flight Service Stations (FSSs) be able to assist me in determining if my flight is captured in an AFP, what my EDCT delay is, or help file routes around an AFP?  
A: FSSs are currently unable to obtain AFP EDCT information without calling a Tower, Tracon or ARTCC. Although they do receive Advisories, they are not equipped to keep up with updates, reroutes, revisions or cancellations.
7. Q: Will DUATS show AFP and alert me that I am included in the program?  
A: DUATS (Direct User Access Terminal System) is a web system that provides a wide range of services to pilots, but does not provide EDCT information. Services

include weather briefings, flight planning, aeronautical data, NOTAMS, TFRs, weather graphics, etc. DUATS provides Advisories in plain text format, but they are very difficult to read. It is unlikely that a GA pilot will get any AFP or EDCT information from DUATS based on their current capabilities.