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# Air Traffic Bulletin

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A Communication from the  
Vice President, System Operations Services

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## **Enhanced Traffic Management Tools**

### **Overview**

/TERF/ Pilots and controllers must contend with various weather events, such as thunderstorms, which affect the safety, capacity, and efficiency of the National Airspace System (NAS). Thunderstorms can create major disruptions in the efficient flow of air traffic and significantly increase the workload of affected air traffic control (ATC) facilities.

New innovations are being developed behind the scenes for traffic management automation and procedures. System Operations Services continually researches tools, procedures, and automation technologies to assist air traffic and aviation customers to meet growing demand. While work is ongoing throughout the year, the fall and winter seasons provide an opportunity to develop and test theories before the spring thunderstorm events occur.

### **Airspace Flow Programs (AFP)**

AFPs provide the capability to selectively manage predefined airspace capacities. The AFP is an integration of the flow evaluation area/flow constrained area (FEA/FCA) function of the traffic situation display with the flight schedule monitor. The David J. Hurley Air Traffic Control System Command Center (ATCSCC) generates slot times for flights scheduled

through the defined constraint. This reduces airborne volume, providing air traffic control a more manageable reaction to the constraint. It also allows the aviation customer more control and options for handling the reduced airspace capacity. The end result is a collaborative use of airspace that allows a manageable flow of air traffic through en route facilities.

The AFP technology is progressing, with new concepts for use realized this year. More predefined AFPs also have been developed for 2007 based on known airspace constraints. The ATCSCC, ATC facilities, and the aviation customers have been working to develop these predefined AFPs that identify airspace that may require initiatives to manage their use.

The process of integrated collaborative routing (ICR) has also been designed for implementation this spring. ICR is a process that builds on FEAs/FCAs and requires that a constraint be identified early. The ATCSCC may issue a planning advisory describing the system constraint and providing route guidance. NAS customers are allowed an opportunity to consider the area of concern and provide early intent (EI) messages communicating their decisions in response to the constraint. EI messages update the Enhanced Traffic Management System flight trajectories, monitor alert values, and routing intentions. The ATCSCC can then analyze the customer responses and decide if the actions taken have resolved the issue, or if recommended routes, required routes, AFPs, and/or other traffic management

initiatives will be necessary to further reduce demand.

### **General Aviation, Coded Departure Routes (CDR)**

CDRs have been used for almost a decade in the United States and have proven to be a safe and efficient means to provide rapid, alternative routing for departures. The objective of CDR use is to swiftly provide optional departure routes and coordination procedures that mitigate adverse NAS impact and reduce departure delays. CDRs are used when normal route structures become unusable because of weather, outages, and other NAS constraints.

On June 1, 2007, CDRs associated with abbreviated clearances become available for some general aviation participants. The pilot must be familiar with the use of CDRs, have the latest available routes onboard the aircraft, and be fueled for alternative routing. The pilot will advise ATC that they can accept CDRs, and will include “**CDR CAPABLE**” in the remarks section of the flight plan.

The official FAA Web site, [www.fly.faa.gov](http://www.fly.faa.gov), includes a link to the Route Management Tool (RMT). RMT provides capability for all customers to search CDRs that are available, or all optional routes from a specific departure point that may be used if the pilot chooses to participate.

CDRs have a proven record of use, a supportive database, and efficiently reduce departure delays. This will ensure the expansion of CDR use will continue to be beneficial for the FAA and the aviation customers.

### **Playbook Routes**

Playbooks provide precoordinated routes for severe weather avoidance. Playbooks contain a series of well-developed routes that respond to NAS constraints and alleviate traffic volume through the area of concern. Playbooks are developed in concert with ATC facilities and the aviation customers. The major benefit is the time savings gained by the reducing required coordination to use these routes, since they have already been developed and coordinated nationally.

A link to all available playbooks and routes is available at:

<http://www.fly.faa.gov/PLAYBOOK/pbindex.html>

Playbook routes are reviewed periodically. The following are some changes that occurred this year:

- Two new playbooks will provide relief for flights departing the Boston, Washington, and New York Air Route Traffic Control Centers (ARTCC) for the west coast.
- Playbook routes were revised in association with the Chicago O’Hare Modernization Program.
- Playbook routes were revised that affect traffic transitioning between Canada and Minneapolis ARTCC.
- Additional offshore routing has been developed between the northeast and Florida.
- Playbook routes were revised to reduce traffic volume over Pocket City (PXV) when the “NO-J6” and “NO-J48” playbooks are used.
- Playbook routes were provided from Seattle and Oakland ARTCCs to destinations in the Los Angeles area.

### **Route Option Generation (ROG)**

RMT is being updated with new capabilities including Route Options Generation (ROG). ROG allows users to view CDRs, national preferential routes, and playbook routes. The ROG workspace provides customers with the capability to identify precoordinated reroute options for their flights affected by a constraint or traffic management initiative. ROG also allows traffic management coordinators to identify reroute options for flights. The ROG provides enhanced flight list grouping and mapping capabilities, as well as decision support for developing route guidance using playbook plays. The ROG integrates with the RMT map to display the relevant information (e.g., FEA definition, flight list, and available reroute options).

### **Summary**

Thunderstorms, which are common to the spring and summer seasons, are quickly approaching. So too are the new tools and procedures that will continue to assist the FAA with meeting its mission requirements and achieving its goals of safety and greater capacity. The AFPs, CDRs, playbooks, and ROG will continue to support the future needs of the aviation customers and assist ATC controllers with moving aircraft and customers across the NAS efficiently and safely.

*In this publication, the option(s) for which a briefing is required are indicated by an asterisk (\*) followed by one or more letter designators, i.e., \*T = Tower, combined tower/approach control, \*R = TRACON, \*E = ARTCC (En route), or \*F = AFSS/FSS. (Reference 7210.3, para. 2-2-8.)*

This table lists Air Traffic Bulletins published since 2002. They can also be found on the Internet at [http://www.faa.gov/airports\\_airtraffic/air\\_traffic/publications/](http://www.faa.gov/airports_airtraffic/air_traffic/publications/).

2002		2003		2004		2005		2006		2007	
02-1	FEBRUARY	03-1	MAY	04-1	**MARCH	05-1	APRIL	06-1	FEBRUARY	07-1	**MAY
02-2	JULY	03-2	**JUNE	04-2	**APRIL	05-2	MAY	06-2	JUNE	07-2	MAY
02-3A	**SEPTEMBER	03-3	AUGUST	04-3	MAY	05-3	**AUGUST	06-3	SEPTEMBER		
02-4	SEPTEMBER	03-4	OCTOBER	04-4	**JULY	05-4	**OCTOBER	06-4	DECEMBER		
02-5	**OCTOBER	03-5	**NOVEMBER	04-5	AUGUST						
		03-6	DECEMBER	04-6	OCTOBER						
				04-7	**NOVEMBER						

\*\* Special Issue