Advisory Circular

Subject: General Aviation, Coded Departure Routes (CDR)

Date: 6/1/07

AC No: 91-77

Initiated by: AJR-1

1. **PURPOSE**.

This advisory circular provides guidance to customers of the National Airspace System (NAS) on the use of Coded Departure Routes (CDR). CDRs provide more flexibility for selecting an alternate departure for a specific airport when a traffic constraint such as thunderstorms, turbulence, and periods of excessive demand exist. Use of a CDR reduces key-entry inputs for controllers and minimizes read-back time between tower staff and pilots, which creates an abbreviated clearance. These abbreviated clearances provide an efficient means for air traffic control (ATC) to provide alternative routes if an airspace constraint occurs.

2. **WHO THIS ORDER AFFECTS**.

This advisory circular affects general aviation users wishing to use CDRs.

3. **RELATED REGULATIONS**.

- Aeronautical Information Manual (AIM), Chapter 4, Air Traffic Control, Section 4, ATC Clearances and Aircraft Separation.

- Federal Aviation Administration Order 7210.3U, Facility Operation and Administration, Part 5, Traffic Management System, Chapter 17, Traffic Management National, Center, and Terminal.

4. **WHAT IS A CDR**?

A CDR is a preplanned route of flight that can be rapidly issued, coordinated, and communicated to pilots, controllers, and FAA automation systems. The CDR route database provides a quick alternative to developing an alternate route at the time a system constraint occurs. In addition, a CDR can be delivered to a pilot in an abbreviated format further hastening what would otherwise be a potentially lengthy process.

CDRs were designed and implemented a decade ago to reroute aircraft rapidly when their intended departure route became unavailable. CDRs, issued in an abbreviated clearance, initially were provided as a test and were provided only to air carriers that had signed memorandums with the departure facility. CDRs have proven to be a very safe and effective process for mitigating constraints and delays. CDRs are in use in almost every large terminal facility in the United States and continue to expand as air traffic facilities identify new routes that provide beneficial results.

CDRs are identified by a unique 8-character identifier, for instance, “ORDLAX1N”. In this example, the first three characters identify the departure airport. Characters 4 through 6 identify the destination airport, and the last two characters are reserved for local facility adaptation. This example provides a CDR that is from the Chicago O’Hare International Airport to the Los Angeles International Airport and “1N” identifies to the local facility that it is a “North 1” departure route. In this example, the associated route could be: ORD BAE J34 RWF FSD J114 ONL J148 CYS EKR J100 BCE J60 HEC J64 CIVET CIVET5 LAX. Clearly this would be a long route string to deliver to the pilot and enter into automation. Instead, the CDR name is provided to reduce communication and coordination.

5. **WHAT BENEFITS ARE PROVIDED BY CDRs**?

- The benefit of CDR use is to provide optional departure routes and coordination procedures swiftly that mitigate adverse system impact and reduce departure delays.

- CDRs provide alternative departure routes from an airport terminal during periods of constraint or restriction. If a specific standard instrument departure (SID) or filed departure route becomes unavailable, pilots are provided an abbreviated clearance with alternative departure instructions.

- CDRs are used when normal route structures become unusable because of weather, outages, and other system constraints. This provides more routes to reduce departure delays.

- CDRs provide an abbreviated departure clearance and common awareness of available reroutes.

- Air traffic facilities are well-versed on how to manage these routes during periods of system constraint and can provide quicker service to the aviation community.

6. **HOW DO CDRs AFFECT MY FLIGHT**?

- CDRs provide relief for flights departing the terminal environment when the only other choice is to take a delay on the ground or re-file a flight plan away from the airspace constraint.

- CDRs provide a quick and efficient method to provide reroutes to pilots since routes are identified by an 8-character, unique name.

- CDRs provide a complete clearance for the pilot to avoid the restricted departure route, yet still return these flights to their filed en route flight plan when possible. ***Sometimes, CDRs may provide a completely different route to the destination airport.***

7. **HOW DO I KNOW IF MY FLIGHT IS ELIGIBLE FOR CDRs**?

Beginning June 1, 2007, all general aviation customers will become eligible to receive abbreviated clearances. It is the responsibility of pilots to understand the CDR program and how to request that CDRs be issued to them.

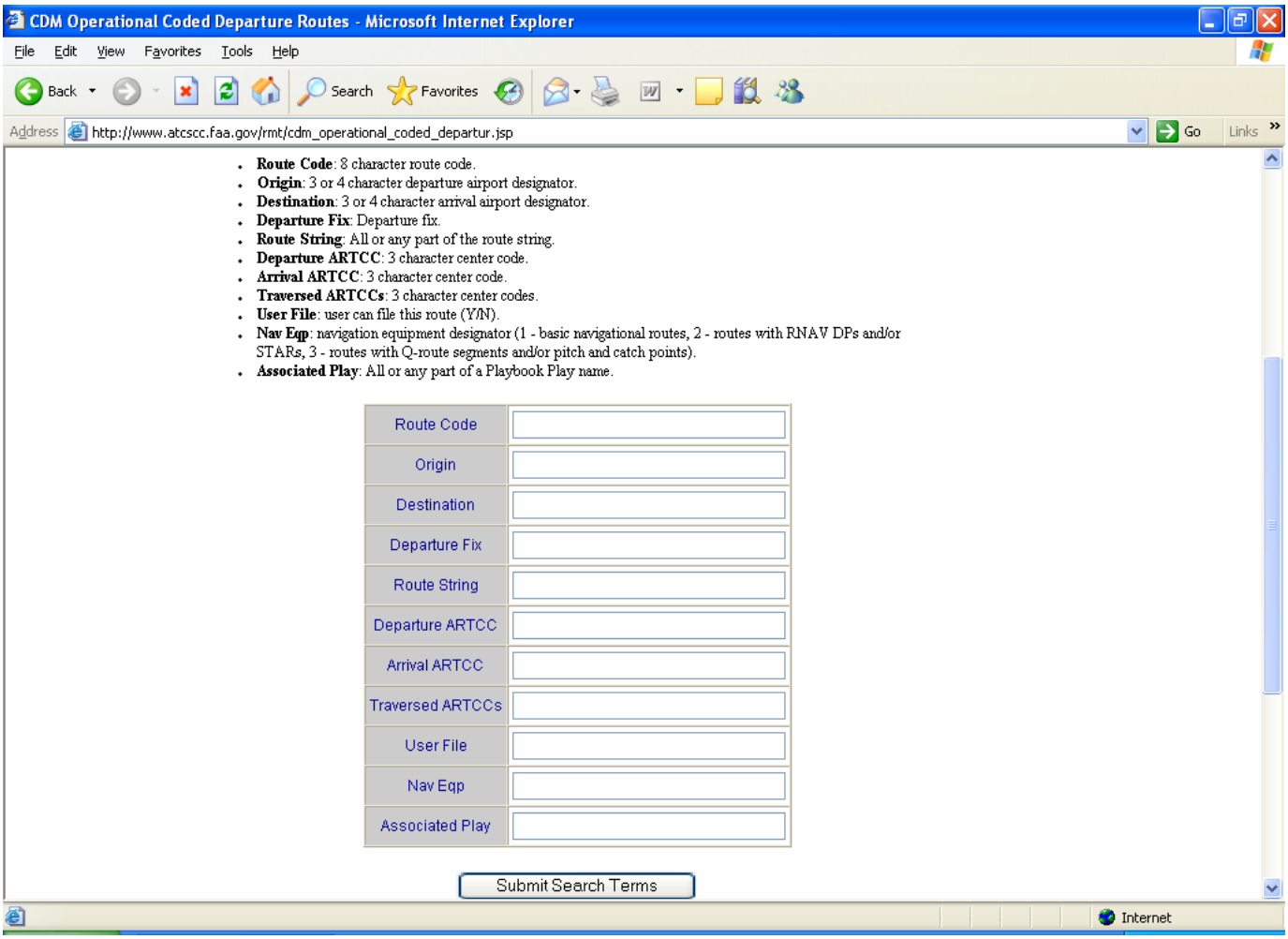
- When a constraint is possible from your departure airport because of thunderstorms, outages, or known volume concerns, the pilot has the opportunity to add "**CDR CAPABLE**" in the remarks section of the aircraft's flight plan.

This identifies the pilot-in-command:

- Is familiar with the CDR program.
- Has a current list of available CDRs onboard the aircraft.
- Can accept a change to the filed route.
- Has the navigation equipment onboard the aircraft to comply with the new route.
- Has sufficient fuel to accept the new route.

8. **HOW DO I FIND AVAILABLE CDRs**?

CDRs are maintained in a database product called the "Route Management Tool" (RMT). RMT is available through the FAA, David J. Hurley Air Traffic Control System Command Center (ATCSCC) Web site at http://www.fly.faa.gov/rmt/coded_departure_routes.jsp.



This link provides a database of all CDRs across the country and is available in a field-searchable format for easy CDR retrieval.

RMT is updated in accordance with the FAA 56-day charting cycle to ensure that all routes associated with CDRs are kept current.

8. HOW DO I RECEIVE A CDR?

The pilot-in-command must have "**CDR CAPABLE**" in the remarks section of the flight plan.

At airports with an airport traffic control tower, controllers will initiate and issue CDRs when they become necessary.

Pilots cannot file the CDR name in their flight plan, for example *"*ORDLAX1N.*"* However, they are allowed to file the complete route associated with CDRs:

ORDLAX1N = ORD BAE J34 RWF FSD J114 ONL J148 CYS EKR J100 BCE J60 HEC J64 CIVET CIVET5 LAX

This makes CDRs a great way for pilots to identify valid departure routes before filing their flight plan.

Example of issuance and acceptance of a CDR:

Controller: *"N30FT, cleared to West Palm Beach via the Teterboro Five Departure, TEBPBI26. . . ." – rest of route unchanged.*

Pilot: *"Roger, N30FT cleared to West Palm Beach via the Teterboro Five Departure, TEBPBI26. . . ." – rest of route unchanged.*

NOTE: *If at any time the crew is uncertain of the clearance that has been issued, the tower must be contacted via voice for a full route clearance.*

9. WHAT IF I CANNOT ACCEPT THE ISSUED CDR?

The AIM, paragraph 4-4-1, and title 14, Code of Federal Regulations, part 91, provide clear definition to pilots that are unable to accept an air traffic clearance:

*"*The pilot in command of an aircraft is directly responsible for, and is the final authority as to, the operation of that aircraft.*"* If ATC issues a clearance that would cause a pilot to deviate from a rule or regulation, or in the pilot's opinion, would place the aircraft in jeopardy, it is the pilot's responsibility to request an amended clearance.

Example of issuance and refusal of a CDR:

Controller: *"N30FT, cleared to Fort Lauderdale via the Teterboro Five Departure, TEBFLL76. . . ." – rest of route unchanged.*

Pilot*: "Teterboro Ground, N30FT – <u>Unable CDR</u>, no HF."*
Tower will then issue a full route clearance*.*

10. WHERE CAN I FIND MORE INFORMATION?

Listed below are links to additional information about CDRs:

http://web.nbaa.org/public/ops/airspace

http://www.fly.faa.gov/rmt/coded_departure_routes.jsp

Michael A. Cirillo
Vice President, System Operations Services
Air Traffic Organization