

Waypoint Naming Conventions

ARINC Specification 424 provides waypoint naming conventions used in the database. Listed below are examples of the most common ones that might be encountered when accessing the Navigation Database.

D235H DME waypoint on radial 235° at 8 nm (H is 8TH letter)

XYZ29 Point identified by "X" on enroute chart, 29 nm from the XYZ VOR (distances less than 100 nm)

12ABC Point identified by "X" on enroute chart, 112 nm from the ABC VOR (distances greater than 100 nm)

FF26 FAF for Runway 26

OM26 Outer Marker for Runway 26

MM26 Middle Marker for Runway 26

CF26 FAF for Runway 26 (usually located on final approach course 2-5 nm outside of FAF)

RW26 Threshold coordinates for Runway 26

MA26 Missed Approach Point (MAP) for Runway 26

R-345 DME Arc Terminator on radial 345°

Example Latitude/Longitude Named Waypoints (Oceanic):

ARINC 424 Format	FMS Lat/Long Format
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5275N	52N075W
75N70	75N170W
5020E	50N020E
50E20	50N120E
5275W	52S075W
52W20	52S120W
6030S	60S030E
60S30	60S130E

Oceanic waypoints (OWPTs) are used for aircraft position reporting upon entry to and exit from oceanic control areas. In the Navigation Database, these waypoints have a five character identifier consisting of the latitude and longitude of the waypoint. The FMS converts this five character identifier to a seven character identifier for screens allowing the display of seven characters or more. For fields that allow less than seven character identifiers, the five character identifier is displayed. When manually entering a waypoint identifier, the FMS accepts either the five or seven character OWPT identifier.

For example, an oceanic waypoint with coordinates of 52:00:00 North Latitude, 75:00:00 West Longitude has the five letter identifier 5275N in the Navigation Database. When the FMS converts it to a seven letter identifier, it is displayed as 52N075W.

NOTE: The Navigation Database contains mileage breaks or turning points (unnamed intersections) which are identified on enroute charts only by an "X". To interrogate a mileage break up to and including 99 DME from the associated navaid, enter the navaid identifier, then the DME distance to the point. For example, if the mileage break were 54 DME from PDX, then the proper entry would be PDX54. To interrogate a mileage break 100 DME or farther from the associated navaid, enter the last two digits followed immediately by the navaid identifier. For example, if the mileage break were 110 DME from FST, then the proper entry would be 10FST.

The following are examples of different enroute, terminal and approach waypoint naming conventions:

- R-123 - DME ARC terminator on 123° radial
- TUS – Typically a navaid, e.g., the TUS VOR (or NDB)
- BASER - A pronounceable 5-letter intersection name
- TUS45 - A 45 DME fix from the TUS VOR
- 21TRM - A 121 DME fix from the TRM VOR
- MA123 - The MAP for a circling procedure, lying on the 123 degree radial from (or bearing to) the referenced navaid.