AERONAUTICAL CHARTING MEETING
Charting Group
Meeting 18-01 – April 25 - 26, 2018

RECOMMENDATION DOCUMENT

FAA Control # 18-01-320

Subject: Publish Center Surface Boundaries in NASR

Background/Discussion: Currently, the center boundaries are published in NASR data for ARTCC boundaries by altitude, type and ID. By altitude includes low and high boundaries. Surface boundaries are not included. Flightplans must be routed to the center responsible for the airspace. For airports, this data is included in NASR data on a "by airport" basis, so a flightplan service provider knows the appropriate center that handles the airport. However, flightplans don't always originate at airport. When they originate at a point other than an airport, centers have agreements between themselves as to which geographical area or point is adapted by that center. In the vicinity of charted FIR/Center boundaries, there is much ambiguity as to which center will handle a flightplan. The data describing the surface boundaries is what is used by each center to determine if they handle the airspace or not. If a center does not handle the airspace, ERAM will reject any flightplan routed to it via the AFTN network. Pilots are not always aware of rejections of flightplans as substantial time may have elapsed between when a flightplan is filed by the pilot and when it is delivered to ERAM as it is very dependent on the flightplan provider (Leidos uses 3 hours before ETD, DUATS.COM uses 2 hours, and other providers can set their own time up to about 22 hours in advance of departure.) So the pilot gets to the point and attempts to pick up their clearance, but it is unavailable or the flightplan is continuously rejected.

Examples of IFR flights which would begin at a point other than an airport include: a helicopter at an accident scene, a farmer who has his own strip, a sea plane departing from a lake or river, or a pilot who wishes to depart VFR and pick up their IFR clearance enroute at a VOR or fix. If the surface boundaries are different than the charted boundaries for an area, the flightplan has no way of being accepted by the system and the flightplan will be rejected and dropped by the system. Areas where this is a common occurrence includes between New York and Boston Center, Washington Center and New York Center, Miami Center and Jacksonville Center, and many more.

If the surface boundaries are published, then any flightplan provider can determine which center handles any geographical point in the US airspace and route a flightplan to the appropriate center for filing.

Recommendations:

Publish and maintain the surface boundaries used by all the US Centers. The data already exists. It does not need to be charted.

Comments:

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Date: 1/25/2018

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John Collins, ForeFlight, briefed the new recommendation. John explained that, when filing a flight plan that originates at a point other than an airport, it can be difficult to determine the relevant Air Route Traffic Control Center (ARTCC) for the departure point. He explained that flight plans must be routed to the Center responsible for the airspace and that this is the *surface* ARTCC. John notes that High Altitude and Low Altitude ARTCC boundaries are stored in the National Airspace System Resource (NASR) database and are depicted on charts, but the ARTCC boundaries at the surface are what is needed for the correct routing of flight plans and these are not provided. If/when the flight plan is routed to the incorrect Center, John asserts that the ERAM (En Route Automation Modernization) system rejects the plan, often without the pilot's knowledge. The ambiguity of Center responsibility is particularly prevalent in the vicinity of FIR/Center boundaries. John recommends that ARTCC surface boundaries be entered and maintained in the NASR database. He stressed that surface boundaries need not be charted, but should be databased.

Scott Jerdan, FAA/AJV-533, replied that is it certainly possible that the FAA could enhance NASR to add surface ARTCC boundaries (provided a source is designated and documented), but suggested that the problem be investigated further before that step is considered. He believes this may be a problem with the flight plan process because the system should be able to handle filings that do not originate at an airport. He suggested that the FAA office that is responsible for this process be engaged in conversation. John stated that the ERAM system rejects these flight plans automatically, despite the fact that ERAM has the Center surface boundaries. Scott said that AJV-5 will engage with Flight Service and ERAM representatives to try to determine why these flight plans are being rejected. Scott said he is willing to make the information available in NASR, but would like to investigate a simpler solution first.

STATUS: OPEN

ACTION: Scott Jerdan, FAA/AJV-533, to investigate why ERAM is rejecting flight plans that originate at a point other than an airport.

ACTION: Jill Olson, FAA/AJV-553, and Brian Murphy, FAA/AJV-562, committed to taking the issue to a meeting of the Community of Interest (COI), to which ERAM representatives are in attendance. (Post meeting)

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Valerie Watson, FAA/AJV-553, reviewed the issue. Scott Jerdan, FAA/AJV-533, provided an update on progress made since last ACM. Scott stated that his team provided the Center surface boundary data to ForeFlight for testing and that Foreflight reported that the data and the format will meet their needs. Scott reported that Jill Olson, FAA/AJV-553, is working to establish a Memorandum of Agreement (MOA) with the ERAM office to supply the necessary data to AJV-5 on a regular basis. Once the MOA is in place, and the data is being received, AJV-5 will post the data on the AJV-5 website for dissemination every 56 days.

Valerie asked if the National Airspace System Resource (NASR) database will be populated with Center Surface Boundaries. Brian Murphy, FAA/AJV-562, replied that in the short-term, they will not be in NASR, but that is a long-term goal.

STATUS: OPEN

ACTION: Jill Olson, FAA/AJV-553, will continue work to establish a Memorandum of Agreement (MOA) with the ERAM Office to supply AJV-5 with the Center Surface Boundary data files every 56 days.

ACTION: Brian Murphy, FAA/AJV-562, will work to establish a 56-day posting schedule for the Center Surface Boundary data to the AJV-5 website once the Memorandum of Agreement (MOA) with the ERAM Office is in place and the data is being received.

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Valerie Watson, FAA/AJV-A250, reported that AJV-A is now posting the requested ARTCC Surface Boundary data on the AJV-A Aeronautical Data website. Brian Murphy, FAA/AJV-A130, said that the data is updated and posted every 28 days. There was agreement that all actions have been fulfilled and this item could be closed.

URL: https://www.faa.gov/air_traffic/flight_info/aeronav/aero_data/Center_Surface_Boundaries/

STATUS: CLOSED