

AERONAUTICAL CHARTING MEETING
Charting Group
Meeting 23-01 – April 25-27, 2023

RECOMMENDATION DOCUMENT

FAA Control #23-01-377

Subject: Cartoon-Type Leaders on NAVAID Boxes on Procedure Charts

Background/Discussion:

When charts were initially designed, some cartographic depiction of features was added to the specifications to aid in the “look” of the chart. One of these techniques was the use of the “cartoon-type leader” for NAVAID boxes (see image below). All NAVAIDs and named marker beacons that utilize a NAVAID box are currently shown with a cartoon-type leader, as shown on the image below on the left, with the exception of primary NAVAIDs on IAPs which utilize a straight leader, as shown on the image below on the right.



The cartoon-type leader provides no additional information to the pilot, but is simply used for aesthetic purposes. Creating these cartoon leaders is currently a manual process, which results in the inconsistent depiction of the cartoon-type leader. Also, depending on the complexity of the chart, additional compilation time is required to add this aesthetic value. As chart automation advances, it would be more efficient to display one type of leader.

It should be noted that the cartoon-type leader is not explained in the AIM, IPH, IFH, Aeronautical Chart Users' Guide or any other aviation handbook that was readily available. There is also no reference found in the symbology portion of ICAO Annex 4, Appendix 2, nor in the TPP Legend. For that reason, we feel the removal of the cartoon-type leader should have no impact on aviation safety.

Recommendations:

Terminal Charting requests to remove the cartoon-type leader from all Terminal charts for easier maintenance and future automation efforts so that all NAVAID boxes are leaded consistently.

To enhance the depiction of the primary NAVAID on IAP charts, Terminal Charting suggests an 8 weight box instead of 6 weight box.

Reference: Attachments

Benefits:

- 1) Would adoption of the recommendation prevent or reduce the likelihood of occurrence of accidents or incidents? No
- 2) Would adoption of the recommendation mitigate a known or potential safety hazard? No
- 3) Would adoption of the recommendation resolve a known or potential issue creating operator or Air Traffic Control system errors? No
- 4) Would adoption of the recommendation increase operational or system efficiencies? No
- 5) Would any additional benefits be recognized by adoption of the recommendation? Yes, improved readability of charted information. Bolding the primary NAVAID box will be more intuitive than the less obvious cartoon-leader. In addition, internal efficiencies would be gained with easier maintenance of current chart inventory. Finally, standardizing the depiction of the NAVAID box will help with future automation efforts.

Comments:

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MEETING 23-01

Krystle Kime, FAA/AJV-A222, presented a recommendation from the Terminal Charting Team to remove the cartoon-type leader, or fillet, from NAVAID boxes and marker beacons on Terminal charts, and replace it with a standard straight line leader. She explained that the cartoon-type leader provides no additional information to the pilot and is simply used for aesthetic purposes. Creating these leaders is currently a manual process that requires additional compilation time and can result in an inconsistent depiction. As chart automation advances, it would be more efficient to display one type of leader. In order to enhance the depiction of the primary NAVAID on Instrument Approach Procedure (IAP) charts, Terminal Charting suggests using an 8 weight box instead of a 6 weight box. The examples attached to the [Recommendation Document](#) show the current and suggested changes. The third BUR example shows the proposed line weight change.

Mark Mentovai, Manhattan Flight Club, said he thinks the FAA should keep the cartoon-type leaders. He finds straight leaders make the charts harder to read and harder to differentiate the meaning.

Kevin Allen, American Airlines, thinks this is not an issue because third party chart providers have their own charting standards and do not follow these rules. Krystle confirmed these changes are only being recommended for FAA charts.

Kevin Carter, NGA, said the military does not use the cartoon leaders and has had no issues with users.

Mike Stromberg, UPS IPA, pointed out that people do not like change, but if the DOD has been using straight line leaders without any problem, then he thinks that is a good case study. He agrees the line weight change would be helpful.

Rich Boll, NBAA, said he does not see a problem with making the change.

Steve Madigan, Garmin, does not think this is an impactful change. He asked whether the boxes are currently masked. Krystle said they are not currently masked and will not be masked with the proposed change.

The majority of ACM participants voted to accept the proposal and move forward with the change.

STATUS: OPEN

ACTION: Jennifer Hendi, FAA/AJV-A250, will process an Interagency Air Committee (IAC) specification change to replace the cartoon-type leader with a straight line leader and to change the primary NAVAID box to a thicker line weight.

MEETING 23-02

Jennifer Hendi, FAA/AJV-A250, reported that the Interagency Air Committee (IAC) specification change to replace the cartoon-type leader with a straight-line leader and to change the primary NAVAID box to a thicker line weight was signed and will be implemented day forward with the 5 October 2023 chart cycle. All actions are now complete, and this issue can be closed.

STATUS: CLOSED