Subject: Procedure Turn (PT) Barb Placement

Background/Discussion: Charting Specifications state that PT barbs shall be placed at the PT turn limit, and also states that when there is a fix along the track that is not associated with the procedure turn, the barb will be adjusted prior to this fix (see below).

3.4.4.14.1 Procedure Turn Barb

The procedure turn shall be shown by a barb symbol as illustrated below. The barb shall be a half arrowhead, .10" long and .05" wide positioned on the maneuvering side. The tip of the barb shall be shown at the procedure turn limit listed on the procedure source document (e.g., 10 NM, 15 NM). Inbound and outbound 45° off-course bearing values (a directional arrow with the inbound value only) shall be shown on either side of the procedure turn barb in 7 point type, e.g.,

![Figure 3.13 Procedure Turn Barb]

When there is a terminal/feeder fix along the procedure track that is not associated with the procedure turn, the barb shall be adjusted prior to this fix, space permitting.

![Figure 3.14 Adjusted Procedure Turn Placement]

When there are graphical conflicts to these specifications, is it more important to chart the PT barb at the PT limit, or adjust the PT barb to be shown prior to the fix that is not associated with the procedure turn?
Option 1: The procedure turn limit is to remain within 15 NM of the VORTAC (Cat E use this procedure). However, NIRRI is graphically shown within the procedure turn but is not actually part of the procedure turn.

Option 2: The procedure turn is charted prior to NIRRI, but the PT barb limit is now graphically shown as 10NM.

**Recommendations:** Develop specification based upon guidance received from Aeronautical Charting Meeting.

**Comments:**

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**MEETING 21-01**

Krystle Kime, FAA/AJV-A222, presented the new recommendation. She explained that the Interagency Air Committee (IAC) charting specification for Instrument Approach Procedures states that the procedure turn barb depiction in the planview should be placed at the procedure
turn limit. The charting specifications also say that when there is a fix along the track that is not associated with the procedure turn, the barb is adjusted prior to that fix. This can become a problem when the procedure turn limit is 15NM and there is a fix charted that is not part of the procedure turn. It becomes a question of whether it is more important to chart the procedure turn at the 15NM limit, or to adjust it so that it is shown prior to the fix that is not associated with the procedure turn. Krystle presented two options for the audience to consider. Option 1 shows the procedure turn to scale. Option 2 shows the procedure turn charted prior to the fix not associated with the turn.

Jeff Rawdon, FAA/AFS-420, asked if there are any issues with documentation on the procedure source forms. Krystle confirmed there are no problems with the source and this is strictly a charting issue.

Valerie Watson, FAA/AJV-A250, pointed out that the procedure turn is typically shown to scale. She said that it is sometimes pulled in and depicted before the fix, but in her opinion, she believes that can lead to more confusion. She pointed out that the profile clearly shows that the fix is not part of the procedure turn. She would prefer to keep the procedure turn barb placement to scale in all cases. Krystle agreed and said that she also prefers option 1.

Several audience member expressed their preference for option 1. An informal poll was conducted to determine if the audience prefers option 1 or 2. The overwhelming majority of the respondents preferred option 1.

Rich Boll, NBAA, asked if the procedure turn barb depiction is documented in the Chart Users’ Guide. Valerie wasn’t certain but said Aeronautical Information Services will look into that and ensure it is documented appropriately.

Valerie summarized ACM concurrence for option 1. She said she will take an action to update the IAC specification to remove the conflicting stipulation and Jennifer Hendi, FAA/AJV-A250, will investigate the need for revised guidance in the Chart Users’ Guide.

**STATUS: OPEN**

**ACTION:** Valerie Watson, FAA/AJV-A250, to process an Interagency Air Committee (IAC) specification change to document that the procedure turn barb will always be shown to scale.

**ACTION:** Jennifer Hendi, FAA/AJV-A250, will make any necessary updates to procedure turn limit guidance published in the Chart Users’ Guide.

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**MEETING 21-02**

Samer Massarueh, FAA/AJV-A223, reviewed the issue. Valerie Watson, FAA/AJV-A250, said the Interagency Air Committee (IAC) specifications and the Chart Users’ Guide have been updated to support showing the procedure turn barb to scale whenever possible. Changes will be implemented on the Instrument Approach Procedure charts on a day forward basis. All actions are complete and there was agreement to close this issue.

**STATUS: CLOSED**