# AERONAUTICAL CHARTING MEETING Instrument Procedures Group Meeting 22-02 – October 24-25, 2022

#### RECOMMENDATION DOCUMENT

**FAA Control # 22-02-372** 

**Subject: Circling NA Areas and Implicit NA Runways** 

#### **Background/Discussion:**

Circling restrictions can be stated either by enumeration of NA runways or by giving an area through which Circling is not permitted. Both are often used concurrently when flight inspection or obstacle surveys deem circling in certain areas are hazardous and/or certain runways are not authorized.

In some cases, this can result in ambiguity when considering the splay applied to circling area restrictions. See KIYK. RNAV RWY 02 (Figure 1):

INYOKERN, CALIFORNIA		AL-5417 (FAA)	21280
APP CRS <b>017</b> °	Rwy Idg <b>6275</b> TDZE <b>2442</b> Apt Elev <b>2457</b>		RNAV (GPS) RWY 2
RNP APCH.  Circling Rwy 10, 33 NA at night. Circling NA east of Rwy 15-33. Circling NA at night west of Rwys 2 and 15. Except for operators with approved weather reporting service, use Mojave altimeter setting, if not available, procedure NA.			MISSED APPROACH: (Do not exceed 165K until SW bound) Climbing right turn to 8600 direct MIGPE then left turn on track 197° to ASUYU and hold.
MHV AWOS-3 <b>132.225</b>		JOSHUA APP CON <b>133.65 348.7</b>	AUNICOM 122.8 (CTAF) <b>(</b>
DOLETH IO			

Figure 1. Chart Header.

Circling Rwy 10, 33 NA at night.
Circling NA east of Rwy 15-33
Circling NA at night west of Rwys 2 and 15

Considering this example and assuming night operations (which are the most restrictive), Figure 2 illustrates the areas both available (in white) and not available (in shading) for circling operations:

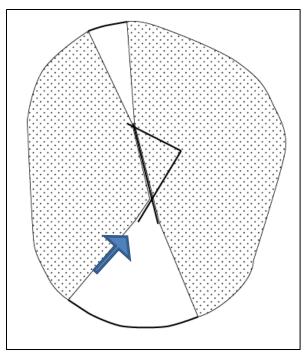


Figure 2. Circling authorized and not authorized areas showing procedure flow.

Figure 3 includes annotations of circling NA area notes along with runway callouts. Runways 20 and 28 are not reachable (yellow) because they are contained within the larger "Circling NA east of Rwy 15-33" area; as a consequence, the FAA does not specifically callout runways 10 and 28 as "NA." Runways 10 and 33 are unambiguously NA (red) based on the note "Circling Rwy 10, 33 NA at night". Runway 2 is unambiguously permitted. Runway 15 is ambiguous due to the splay area cutout and lack of note restricting circling to runway 15.

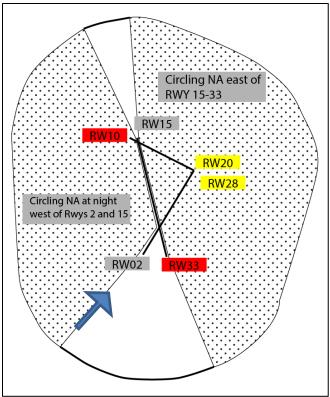


Figure 3. Annotated authorized and not authorized circling areas and runway callouts.

Most prudent pilots assume (rightfully) that Circling to Rwy 15 is NA at night on account of the two NA circling areas, but graphical application of TERPS criteria shows an open splay on runway 15 and no note specifically states that Circling is NA to runway 15. In our estimation, runway 15 ought to be added to the Circling NA at night note since runway 15 is unreachable other than by entering an NA area.

The other issue is the splay. Pilots don't have intimate knowledge of 8260 guidance on splay geometries. Accordingly, while the pie-shaped cutout north of the airport seems to be the consequence of notes "Circling NA east of Rwy 15-33" and "Circling NA at night west of Rwys 2 and 15," a clearer wording could be used to indicate what is likely intended and what is likely in the mind of the pilot as shown in Figure 4.

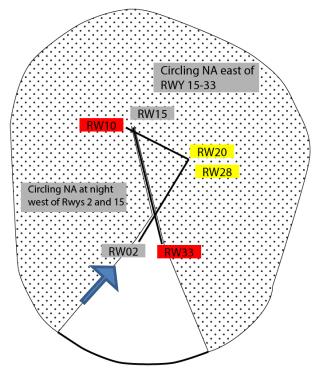


Figure 4. Notional intent of NA circling areas.

### **Recommendations:**

Garmin recommends a criteria change to cover cases like KIYK runway 15 and provide clarity via a chart note stating that a specific runway is NA.

When more than one runway is used to define NA circling areas, improve splay design and/or wording used to describe the NA circling area.

#### **Comments:**

<u>Submitted by</u>: Steven Madigan <u>Organization</u>: Garmin Intl **Phone**: 913.440.6025

**E-mail**: Steven.Madigan@garmin.com

**Date:** 9/8/22

Please send completed form and any attachments to: 9-AMC-AVS-ACM-Info@faa.gov **Initial Meeting 22-02:** Steve Madigan, Garmin, briefed the issue from the RD (slide). He discussed the circling figures on the RD, and recommended a criteria change for locations like KIYK Rwy 15. Dan Wacker, FAA Flight Procedures and Airspace Group (FPAG), asked if the procedure is built to current criteria, and Pat Mulqueen, FAA Instrument Flight Procedures Group (AJV-400), said he will have to review the notes to be sure. Bill Tuccio, Garmin, wondered which diagram depicted in the RD would be correct. Garmin showed the diagrams to several folks and all chose different ones. Pat said his office might want to review this procedure again since the high MDA may be causing problems. Valerie Watson, FAA Charting Products Integration Team (AJV-A250), suggested circling NA at night might be specified as "from RWY 2 extended centerline clockwise to RWY 33 extended." Dan wants to look at criteria again but agrees with Valerie. Kevin Keszler, FPAG, commented the wording for circling restrictions has been around for a long time, and wondered if Garmin compared their request with existing language in publications like the AIM or PCG. Bill said there is nothing in the guidance material on notes similar to this case, so the pilot has to interpret them. Dan said the intent of the airport and Flight Procedures Team Regional Office should be considered and circling restrictions should then be applied accordingly. Dan believes the criteria is clear. Pat does not know what is driving the circling restrictions for this procedure and would like to review it. Jeff Rawdon, FPAG, said while this might not be the best example, the concept of the request is clear, and that this RD will be reviewed by the ARRG. Bill said they have identified 30 to 40 similar approach procedures and will forward the list of those to Jeff. Jeff said this information will help at the ARRG. Pat added when issues like this arise on a public procedure, it is best to enter a specific procedure question through the Instrument Flight Procedures (IFP) Gateway. Pat's group has a requirement to respond within 10 days, but their goal is to respond within one or two days.

## **Actions:**

- Bill Tuccio will forward the results of the query regarding applicable instrument approach procedures to Jeff Rawdon.
- This item will be reviewed by the ACM Recommendation Review Group to determine any action, and that outcome will be provided at ACM 23-01

Status: Item open

Meeting 23-01: Jeff Rawdon, FAA Flight Procedures and Airspace Group (FPAG), briefed the summary, actions, and status from the (slide). The ACM Recommendation Review Group (ARRG) has not received a list of procedures affected by this concern and therefore the impact of this recommendation is unknown at this time. Andrew Lewis, Garmin, is also unsure of the scope and will try and determine what procedures are affected by the issue raised in the RD. Steven Madigan, Garmin, thinks the scope is small and suggested that existing cases could be handled individually.

Pat Mulqueen, FAA Instrument Flight Procedures Group (AJV-400), said the Flight Procedures Team (FPT) office for the procedure area would likely be the best suited to address these individual procedure issues. Steven advised Pat they were told by the FPT to not submit requests for procedure changes like this. Pat will review the procedure

addressed in the RD but added there is a form to suggest criteria changes. Pat will research the concern about the FPT communicating that only the airport operator and ATC are able to make requests as understood by both Steven and Rich, and will ask the Western FPT office about this.

Rich suggested Order 8260.19 criteria could be added to consider things like circling restricted areas during procedure development, but Jeff expressed that writing criteria for a few odd cases can cause problems for others.

Ken Scarborough inquired what would trigger restrictions for listing a runway circling restriction versus an area circling restriction, and Jeff noted examples of when each might be applied.

<u>Actions</u>: Pat Mulqueen, AJV-400, will follow up with the FPT regarding the procedure cited in the RD, and also regarding general requests for procedure revisions from the FPT from other than airport and ATC sources through the IFP Gateway portal.

**Status:** Item open

**Meeting 23-02**: Jeff Rawdon, FAA Flight Procedures and Airspace Group (FPAG), briefed from the slide. Aeronautical Information Services has issued a NOTAM to resolve the confusing chart notes on the approach identified in the original RD.

Pat Mulqueen, FAA Instrument Flight Procedures Group (AJV-400), has confirmed that requests for procedure amendments can be submitted by anyone on the Instrument Flight Procedures (IFP) Information Gateway request form.

Steven Madigan, Garmin, asked about the two different email links on the IFP Information Gateway. Pat clarified one link is to request information about a possible procedure or chart discrepancy and the other is the IFP procedure request form which is routed to the appropriate Flight Procedures Team office. Steve asked about visibility of request resolutions. Pat said discrepancy requests have a ten-day deadline but there are no deadlines on the procedure requests. Pat understands the interest in request resolution visibility and will review the forms to investigate routing and tracking issues. Rich Boll, NBAA, thinks the form still has restrictions that would limit requests from any submitter and would like this issue to remain open until that is resolved. Of particular interest is question #4 which inquires if the submitter has reviewed the proposal with the appropriate airport authority.

<u>Actions</u>: AJV-400 will review the Gateway IFP request forms to determine if there are questions that would limit request submissions.

Status: Item open