

AERONAUTICAL CHARTING MEETING
Charting Group
Meeting 24-02 – October 9-10, 2024

RECOMMENDATION DOCUMENT

FAA Control #24-02-392

Subject: Traffic Pattern Direction on IFR Charts

Background/Discussion:

When a nonstandard (right-hand) traffic pattern is prescribed for a runway, this is noted on the VFR sectional, but not noted on IFR enroute or approach charts. It should be.

VFR Traffic Pattern Direction

VFR pilots know that, under 14 CFR § 91.126(b)(1) and § 91.127(a), they must follow the published traffic pattern direction when approaching an airport (unless ATC directs otherwise in controlled airspace).

The direction is published both in the Chart Supplement and on the VFR sectional, so a VFR pilot can tell which traffic pattern to fly from the sectional alone. See Figure 1.

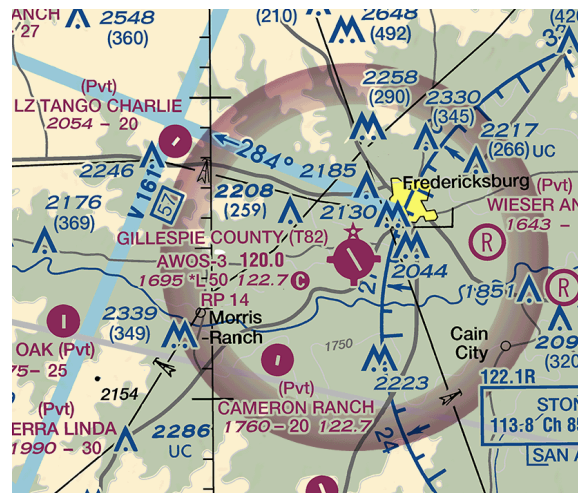


Figure 1. The VFR sectional data block for Gillespie County Airport, Fredericksburg, TX, includes the notation "RP 14," informing VFR pilots that they must fly a right-hand traffic pattern for runway 14. (July to August 2024 San Antonio sectional.)

IFR Circling Approach Direction

IFR pilots flying circling approaches also need to know traffic pattern directions for two reasons: safety among VFR traffic and regulatory compliance.

First, if there could be traffic in the pattern, an IFR pilot may choose to join the pattern, even if it means circling the long way around. This reduces the risk of traffic conflicts with VFR traffic, especially NORDO traffic, that is not expecting an opposite pattern.

The second reason may be more surprising: According to multiple Chief Counsel interpretations, IFR pilots making circling approaches *must* circle in the direction of the VFR traffic pattern (unless a specific instrument approach procedure or, in controlled airspace, ATC says otherwise). They cannot select a left or right circling path at will.

For example, because runway 14 at Gillespie County Airport is right traffic, a pilot flying a circling approach to runway 14 *must* make right turns, unless the approach procedure says otherwise. This is unintuitive to a pilot on the VOR/DME-A approach, which brings aircraft in from the east. See Figure 2. Flying a right downwind to runway 14 from this approach requires crossing over the runway centerline. But the approach does not say “circling NA west of Rwy 14-32,” so pilots circling to runway 14 must make right turns.

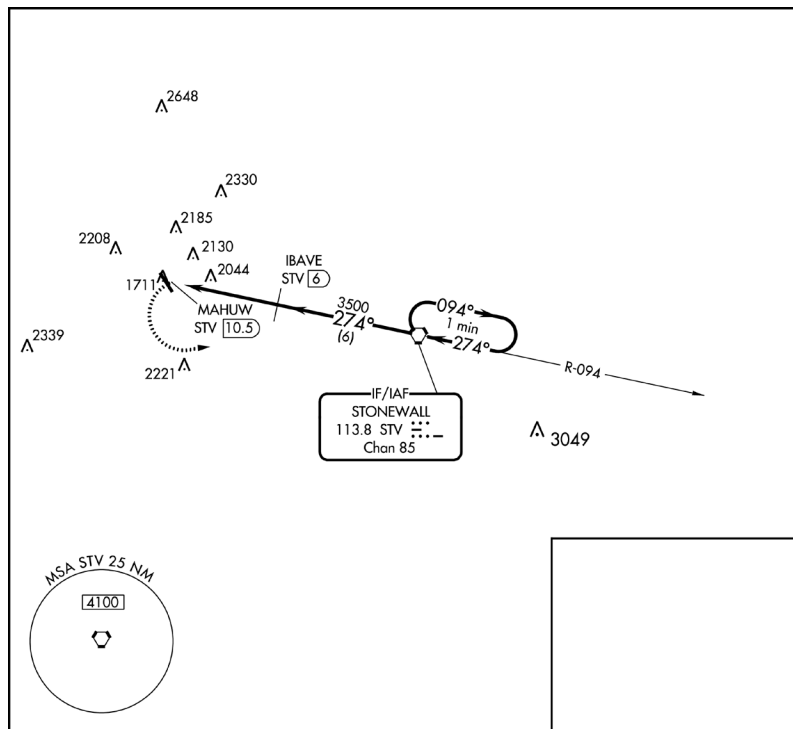


Figure 2. The VOR/DME-A approach to Gillespie County Airport, which brings aircraft in from the east. (July to August 2024 TPP, Julian date 24137.)

The FAA Chief Counsel established this in their Murphy (2009) interpretation letter:

A pilot, flying an aircraft under instrument flight rules in IMC, executes a circling approach to an uncontrolled airport. The airport, by operation of section 91.126(b)(1), has established turns to the left for the approach. However, the pilot determines that turns to the left are undesirable because they are not in the interest of safety [...]. You ask whether that pilot can make turns to the right on that approach.

[...]

The use of “must” in sections 91.126(b)(1) and 91.126(a) do not permit a pilot’s discretion in determining in which direction to make turns when approaching the airport.

It has been confirmed by that office several times, such as in the Collins (2013) and Krug (2014) interpretation letters.

The San Antonio FSDO also confirmed this when I emailed them. They quoted AC 90-66C, which aligns with the Murphy (2009) interpretation letter, at least for approaches under VMC (but without regard to whether the flight is under VFR or IFR):

AC 90-66C [...] has this to say about the circling maneuver: “Pilots conducting instrument approaches in VMC should be particularly alert for other aircraft in the pattern so as to avoid interrupting the flow of traffic and should bear in mind they do not have priority over other VFR traffic. *Pilots are reminded that circling approaches must comply with § 91.126(b) unless the approach procedure explicitly states otherwise. Remember, if the Chart Supplement lists right-hand traffic at a non-towered airport, pilots conducting practice instrument approaches in VMC should circle to the right to enter the traffic pattern.*”

Charting Needs

IFR pilots need traffic pattern information, but can’t easily get it. This is because traffic pattern information is not on IFR charts.

- An IFR pilot uses IFR enroute charts in enroute flight. Even if VFR sectionals are available, they are not as handy in the flight deck.
- Even an instrument student doing practice approaches under VFR will often use an IFR chart, because the point is to simulate IFR. The instructor or safety pilot may use a VFR sectional.
- Yes, IFR pilots can consult the Chart Supplement for the traffic pattern direction. But so can VFR pilots, so why also include traffic pattern direction on the VFR sectional? We’ve added it there so VFR pilots have the most critical information on their most commonly used charts. We should do the same for IFR.

The rule about circling direction is surprising to many pilots I’ve spoken with. To encourage compliance, compliance must be easy. The regulation aside, including traffic pattern direction will help IFR pilots avoid conflicts with VFR traffic in the pattern.

Recommendations:

The FAA should add traffic pattern direction to instrument approach plates, enroute low-altitude charts, or both.

Instrument Approach Plates

Adding traffic pattern direction to instrument approach plates would be best. In theory, an approach plate contains all information necessary to brief and fly the approach. Right

now, to follow § 91.126(b)(1) on a circling approach, a pilot would mostly use the approach plate, but also need to check another chart or the Chart Supplement for the circling direction.

Options to add this information to the approach plate include:

- In the notes box on the plate, a notation such as “Rwy 14 right traffic.”
- An annotation on the airport sketch.
- A diagram on the planview similar to the MSA or TAA graphic, perhaps similar to the segmented circle representation that private pilots learn. (This could be combined with the depiction currently being developed for RD 21-02-362, Circling Restrictions in Instrument Approach Procedures.)

This should be added to *all* instrument approach plates that have circling minimums, even straight-in approaches or those at airports with a continuously operating tower. If there are complicated rules for when circling direction is included and when it is not, it will confuse pilots. For approaches that do not authorize circling to any runway, it may make sense to omit this information, but there is also a case for including it—it would be consistent and could help pilots transitioning from instrument to visual conditions.

Enroute Low-Altitude Charts

I recognize that reviewing every instrument approach plate to add this information may be prohibitively difficult. Thus, an alternative is to add the information to the enroute low-altitude chart, similar to how it is depicted on the VFR sectional.

A pilot briefing an approach would still have to look at two documents—the approach plate and the enroute chart—but at least both would be documents they’re already using under IFR.

I only fly light single-engine aircraft, so I have not thought about whether this should also be added to enroute high-altitude charts. Pilots who fly in the flight levels will be better aware of whether this would help them.

Benefits:

- 1) Would adoption of the recommendation prevent or reduce the likelihood of occurrence of accidents or incidents?

As noted, circling against traffic pattern can be hazardous in the presence of VFR traffic that are not expecting it. This will be less likely if IFR pilots can easily check the traffic pattern direction.

- 2) Would adoption of the recommendation mitigate a known or potential safety hazard?

See #1.

- 3) Would adoption of the recommendation resolve a known or potential issue creating operator or Air Traffic Control system errors?

Operator errors are created by IFR pilots circling against the traffic pattern direction, which violates the Chief Counsel's interpretation of § 91.126(b)(1). This will be less likely if IFR pilots can easily check the traffic pattern direction.

Additionally, including the traffic pattern direction on IFR charts reinforces that IFR pilots need to know about it. This may motivate pilots to research the issue and learn about § 91.126(b)(1).

- 4) Would adoption of the recommendation increase operational or system efficiencies?

Unknown.

- 5) Would any additional benefits be recognized by adoption of the recommendation?

Unknown.

Comments:

In my view, applying § 91.126(b)(1) to circling instrument approaches is somewhat odd. But I am conscious that the ACM is not the forum to change a regulation. This charting change will help pilots follow the rule as written and interpreted by the Chief Counsel.

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