

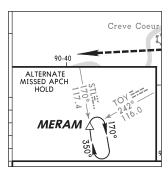
The Magazine for the Accomplished Pilot



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Single-pilot IFR in a light twin can be one of the busiest jobs around. Do the newest mounts make life any easier?

TRY THE OTHER MISSED

Surprise: There are two published missed-approach procedures for that ILS. Are you ready to fly both?

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TRY THE OTHER MISSED

Four out of five approaches are required to have a second published missed approach procedure. Too bad it's not on your chart.

hen Air Traffic Control (ATC) clears you for the approach, they're also clearing you to go missed if necessary. What if the missed approach procedure takes you into congested airspace? How about if there's a buttkickin' thunderstorm holding at the end of your missed approach? Of course, we couldn't leave out the possibility that the missed approach procedure has a NOTAM'd Navaid outage.

In this case ATC might offer you an alternate published missed approach procedure. No, you didn't read that wrong. ATC may have a second, published missed approach procedure ready for you. Get your sharp pencil out, though, because the controller will need to specifically read these alternate instructions to you.

Alternate missed procedures are published, but not necessarily on the standard instrument approach procedure chart. They are published on the FAA Form 8260. I'm sure you've got a pack of those in your flight bag right between your Airport/Facility Directory and VFR sectionals, right? Don't go looking for these waypoints in your GPS database. And you thought unpublished holds were tough.

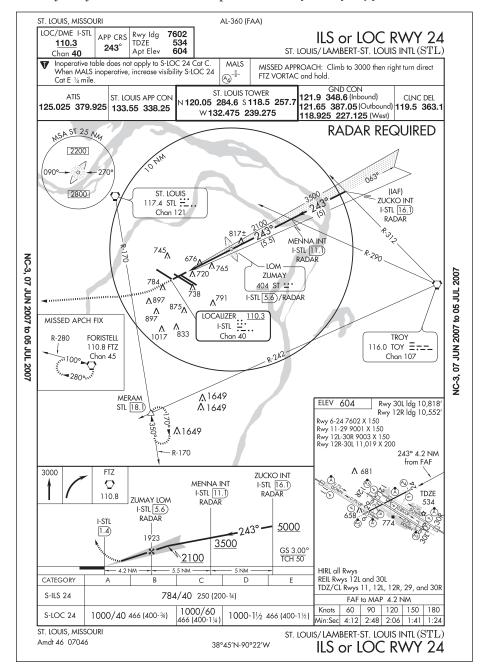
FAA Orders

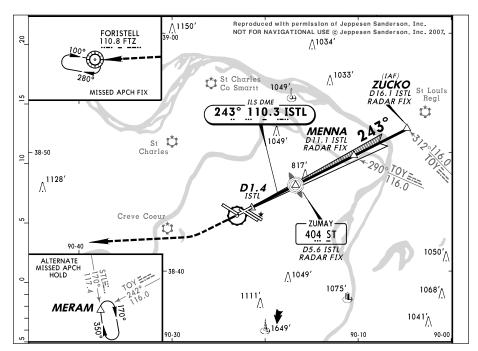
For the past several years, Chapter 8, paragraph 856g of the FAA's 8260.19 has read: "Alternate missed approach holding/termination facility/fix must be charted in the plan view." Have you seen many of these? There are some. Take a look at the ILS or LOC Rwy 24 at Lambert-St. Louis Intl. Airport (KSTL). Notice the two

missed approach holding patterns on the plan view. Both look pretty tempting. One is the primary missed approach holding pattern, complete with instructions, and the other is the mystery, alternate missed-approach holding pattern.

Why not depict two complete missed approach procedures on the chart? The alternate missed approach procedure could simply state, "Alternate" in the text and use a different line type or shading to depict it graphically. After all, charting the alternate missed approach holding pattern lessens pilot and ATC work-

Below: While there's no question which missed approach the plate says to fly, ATC may have you fly the other one.





load; ATC doesn't have to read you the holding instructions. It makes for instant situational awareness.

Alternate missed approach instructions are rarely used and to avoid confusion to the pilot, only one set of instructions are included on the plate. The compromise was to depict only the alternate missed holding pattern on the chart. The actual course, radials, distances and altitudes will still be relayed by ATC. Jeppesen currently charts alternate missed approach holding patterns as a plan view inset labeled "Alternate Missed Approach Fix."

The policy for creating an alternate missed approach holding is any time the final approach course facility and the missed approach course facility use different Navaids, an alternate missed approach procedure must be defined. This means that all ILS procedures will get an alternate missed approach procedure. Similarly, if a VOR approach terminates at an NDB, it will have an alternate missed approach. Finally, if an NDB approach terminates at a VOR, it will have an alternate missed approach defined. All told, approximately 80 percent of the conventional procedures will have an alternate missed approach. Isn't GPS wonderful?

A capable IFR airport could have numerous procedures (ILS, VOR,

NDB and ASR) where all the missed approach procedures go to the VOR for holding. If the VOR went out of service you would lose all the procedures, resulting in a VFR airport. Having an alternate missed approach solves this problem.

What happens if the alternate missed approach procedure has an equipment requirement such as DME or ADF? Technically, you couldn't fly the approach if you weren't equipped for the missed. The FAA publishes these requirements on their 8260 forms — which is of no use to the pilot — but it will also publish them via NOTAM if the alternate missed approach will be in use for any extended period of time. Yet another reason to check NOTAMs carefully.

In the real world, you could refuse the alternate missed and negotiate for some missed instructions you could fly ... or go land elsewhere.

Another Alternate Missed

You are below the MDA/DA or beyond the MAP and unexpectedly lose sight of the runway. Do you follow the published missed? Not according to the AIM and other experts. You should handle the balked landing as if were a takeoff and use the obstacle departure procedure (ODP) instead, assuming one is defined.

Left: The ILS or LOC Rwy 24 in Jeppesen clothes labels the alternate missed. Expect to see this notation on nearly every plate eventually.

Per AIM 5-4-21 (g), missed approach obstacle clearance is predicated on beginning the missed approach procedure at the Missed Approach Point (MAP) from MDA or DA, and then climbing 200 feet per mile or greater. Initiating a goaround after the MAP may result in total loss of obstacle clearance. To compensate, a pilot is supposed to apply procedures used in takeoff planning. You did takeoff planning for your destination, didn't you?

The point is you should brief the airport obstacle and departure data prior to initiating an instrument approach procedure. NACO users will find it in "Take-Off Minimums and (Obstacle) Departure Procedures" section, while Jepp users will usually find it on the back of the Airport Diagram plate.

On the off chance you're having a really bad day and lose both the runway and radio communication at low altitude, you'll have to use your wits. ATC might not be expecting you to fly the ODP, but if you were landing in Eagle, Colo., it might be your only hope.

Be Prepared

The process of updating charts is slow and came later than the process of defining alternate missed approaches. There are far more in ATC's hands than pilots can see on paper. But you can expect to see more of these alternate missed holds appearing on charts. The next challenge will be putting alternate procedures in FMS or GPS databases, and teaching pilots how to pick the right one and fly it.

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