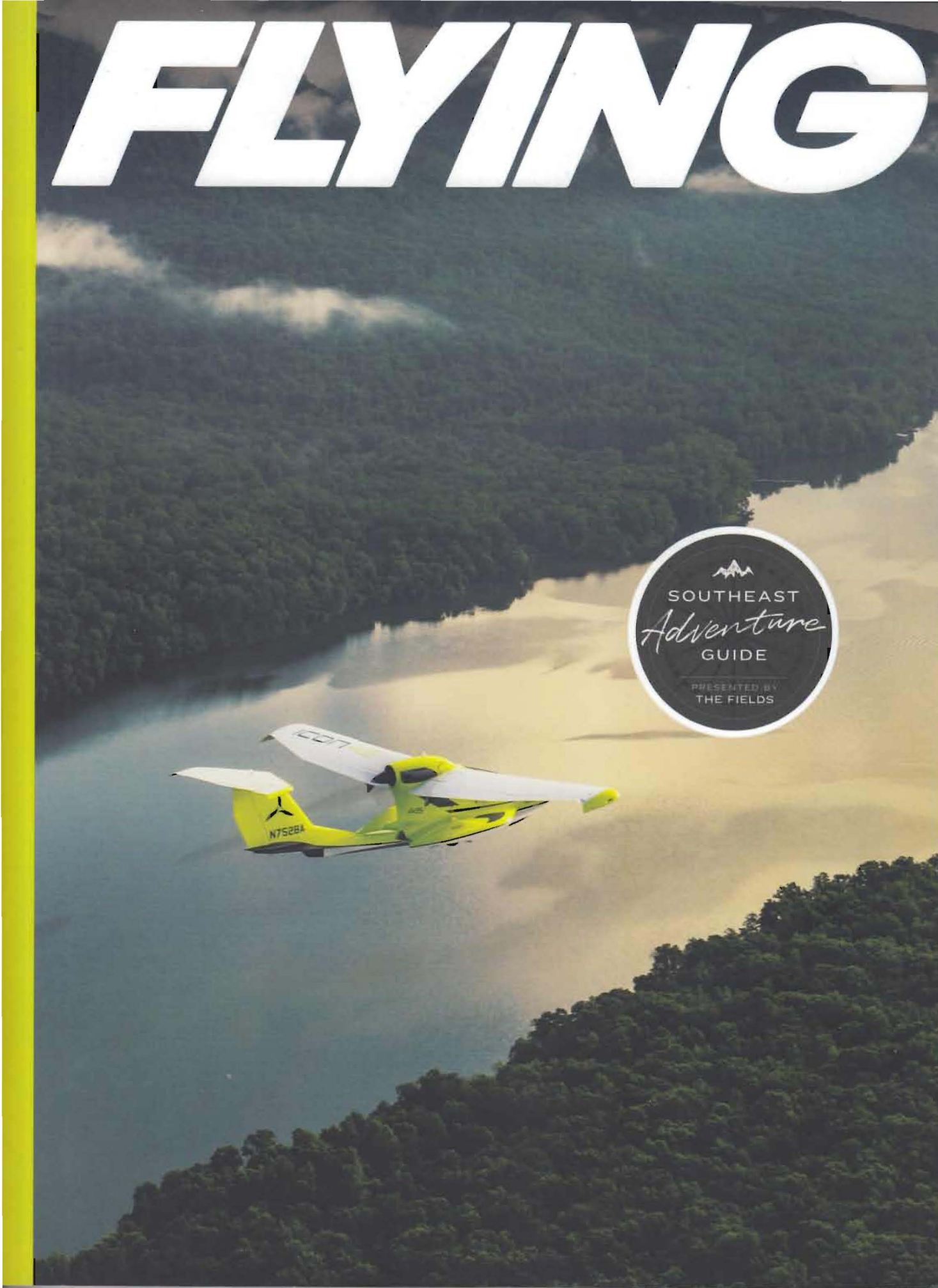
FLYING



CHATTANOOGA ILS OR LOC RWY 2

An approach that lives beyond the Choo Choo VOR.

BY JASON BLAIR

NESTLED ON THE WESTERN end of the Appalachian Mountains, Chattanooga allows you to take advantage of plentiful outdoors activities while still having the opportunity to visit some great city options. As a pilot, who wouldn't want to fly themselves there, right?

If you choose to do so, one approach you might use is the ILS or LOC to Runway 2 at Lovell Field (KCHA). The approach holds a few less-common features to watch for as you fly in. This approach is an example of many around the U.S. that are changing as VORs are decommissioned. Keep an eye out for these at other approaches you fly.

A NDB STILL USED?
In note No. 1 of the chart, and as depicted in the plan view section, you'll see that an ADF is required to identify the NDB. For this particular approach, a pilot might choose to cross the DAISY NDB to establish themselves onto the approach, or it may be used if you need to go missed. The missed approach point (MAP) takes the pilot back to the NDB for the hold. The good news is you can use a current and IFR-certified GPS to identify this point; or, if you happen to still have a functional ADF in your aircraft, you could choose to do it the old-fashioned way. The note that an ADF is required confuses pilots as to whether or not they can make the approach using a GPS. Since the NDB is not being used as the primary navigation source for the inbound approach course, the answer is yes.

B DME ARC
Another method to establish onto the approach is to use the DME arc. You begin by flying to the Choo Choo VOR and then outbound on the 126 radial to intercept the ZIROB waypoint at 12.0 DME from the VOR—or a pilot could navigate directly to ZIROB using GPS. Once reaching this point, the pilot would begin a right-turning DME arc until they inbound onto the ILS/LOC course. Key points include that you fly the DME arc using the VOR (on 115.8) as the nav source, and then transition to the ILS/LOC (on 108.3) once you turn inbound on the course of 022 degrees.

C DME OR NO DME?
While a DME point of D12.0 R-214 GQO is listed for the QUIDS intersection, note that this DME is from the GQO VOR and not a DME fix along the final approach path. This particular ILS/LOC does not indicate that it has DME, so when you are traveling inbound on the course, any DME reporting would need to come from a GPS. This is also noted by the fact that no DME point is given for the MORRT intersection or a MAP along the final approach path. So when do you go missed? Well, if you are flying this as an ILS, the decision height will be important. If you are making a localizer approach, you will need to do it the old-school way: using a timer from your final approach fix (FAF). An example would be using the table in the bottom left of the chart and flying 2:46 at 100 knots from MORTT to the MAP.

D THE VOR IS STILL THERE
The Choo Choo VOR still plays a big part in this approach, for now. The VOR could be used to start the approach, orient for the DME arc, or to help identify the FAF at MORTT using the 258-degree cross radial. It might even be used as an alternate MAP, if the DAISY NDB was unavailable or if ATC needed to create some traffic separation. This is going to change, though, and at some point this approach will change as well. The Choo Choo VOR is not a part of the plan for the minimum operational network (MON) of VORs that will be maintained as a part of the FAA's Next Gen process of airspace modernization. So it's unlikely that updated versions of this approach will still have a DME arc, and it might become necessary to have GPS to fly this particular ILS/LOC approach in the future.

JASON BLAIR is a flight instructor, an FAA examiner, and an author in the general aviation and training communities.

KCHA/CHA
LOVELL

JEPPESEN
4 SEP 20 (11-1)

CHATTANOOGA, TENN
ILS or LOC Rwy 2

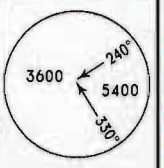
*ATIS (ASOS when Twr inop)	*CHATTANOOGA Approach (R)	ATLANTA Center	*CHATTANOOGA Tower	*Ground
119.85	125.1	132.05 when App inop.	CTAF 118.3	121.7

LOC ICGW	Final Apch Crs	MORRT	ILS DA(H)	Apt Elev 683'
108.3	022°	2227'(1544')	883'(200')	TDZE 683'

MISSED APCH: Climb to 3600' direct CQN NDB and hold, continue climb-in-hold to 3600'.

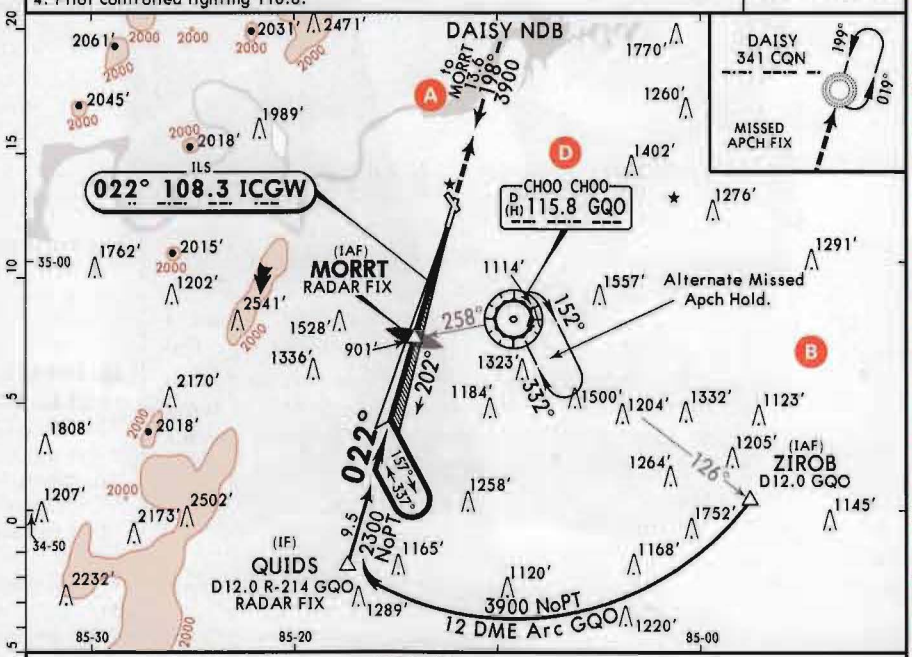
Alt Set: INCHES | Trans level: FL 180 | Trans alt: 18000'

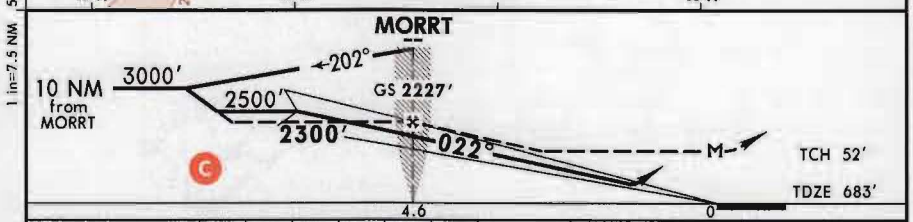
1. ADF required. 2. Circling Rwys 15, 33 not authorized at night.
3. VGSI and ILS glidepath not coincident (VGSI angle 3.00°/TCH 51').
4. Pilot controlled lighting 118.3.



MSA GQO VOR

BRIEFING STRIP™





Gnd speed-Kts		70	90	100	120	140	160
GS	3.00°	372	478	531	637	743	849
MORRT to MAP	4.6	3:57	3:04	2:46	2:18	1:58	1:43

MALSR PAPI | 3600' | D | CQN 341

TERPS STRAIGHT-IN LANDING RWY 2

	ILS DA(H) 883'(200')		LOC (GS out) MDA(H) 1200'(517')		CIRCLE-TO-LAND Max Kts	MDA(H)
	FULL	RAIL/ALS out		RAIL/ALS out		
A	RVR 24 or 1/2	RVR 40 or 3/4	RVR 24 or 1/2	RVR 55 or 1	90	1300'(617') - 1
B					120	1340'(657') - 1
C			RVR 55 or 1	1 3/8	140	1480'(797') - 2 1/4
D			RVR 60 or 1 1/4		165	1580'(897') - 3

TERPS AMEND 7E 3 JAN 2019

CHANGES: Notes.