



U.S. Department  
of Transportation

Federal Aviation  
Administration

# Memorandum

Subject: **ACTION:** TIL01-023A, PFAF/LOC FAF  
Location at ILS Runways

Date: July 24, 2001

From: Manager, Flight Procedure Standards  
Branch, AFS-420

Reply to  
Attn. of:

To: Manager, National Flight Procedures  
Office, AVN-100

Our memorandum dated June 19, 2001, TIL01-023, PFAF/LOC FAF Location at ILS Runways, is cancelled. During the FAA's initial efforts at placing new RNAV instrument approach procedures (IAP) at runways with ILS, Air Traffic representatives have raised objections to the proliferation of fix names/locations due to non-coincidence of RNAV Precision Final Approach Fixes (PFAF) and the Localizer (LOC) FAF. Our policy in this regard is that the RNAV IAP should, whenever and wherever possible, match the ILS at the same runway in the following respects: final and intermediate segment procedure ground track, missed approach, altitudes, fix locations/names, glidepath angles and threshold crossing heights (TCH). Nothing in this policy requires an RNAV procedure to emulate a procedure turn used on an underlying ILS procedure. Due to the many variables involved in procedure design, especially relating to the very different aspects of ILS and RNAV design, it is impractical to set standards for all possible ILS/RNAV designs; therefore, in lieu of hard and fast design standards, the following design guidelines are provided:

a. When designing an RNAV IAP at an ILS runway, the ILS becomes the design standard unless the ILS IAP needs substantial update or has a nonstandard glide slope angle or TCH. If the ILS needs updating it is advisable to publish updated ILS and RNAV procedures concurrently. In emulating an ILS, do not include either a basic "T" or TAA in the RNAV IAP unless specifically requested by Air Traffic.

b. If the ILS PFAF occurs at the LOC FAF, emulation of the ILS by the RNAV procedure may be a simple matter. In this case, the RNAV PFAF can be placed at the LOC FAF location and thus coincidence will have been achieved for the ILS PFAF, LOC FAF and RNAV PFAF. Use the LOC FAF name for the RNAV FAF name. Revising the ILS procedure will, in all likelihood, not be necessary.

c. For a variety of reasons, the situation described in "b" is seldom found in practice. Where the ILS PFAF is not collocated with the existing LOC FAF, the associated LOC portion of the ILS procedure may have to be revised at the same time the new RNAV IAP is developed.

(1) If the present LOC FAF is defined by DME, intersection or radar, revise the ILS procedure by relocating the LOC FAF to coincide with the RNAV PFAF which can be placed at the vertical descent angle interception point for the given ILS glide slope angle/TCH and LOC FAF altitude. Use the LOC FAF name for the RNAV FAF name.

(2) If the present LOC FAF is defined by a facility such as an OM or LOM and localizer DME is available, define the LOC FAF using DME and collocate the LOC FAF and RNAV PFAF as in option c(1) above. If possible, retain the present facility name for use at the LOC/RNAV FAF.

Address any questions to Carl Moore, AFS-420, 405-954-5829.

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cc: Regional AWOs  
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