

GOVERNMENT/INDUSTRY AERONAUTICAL CHARTING FORUM 00-02

November 30-December 1, 2000

Recommendation Document

Subject: Precision FAF (PFAF) Location for RNAV Procedures at ILS Runways

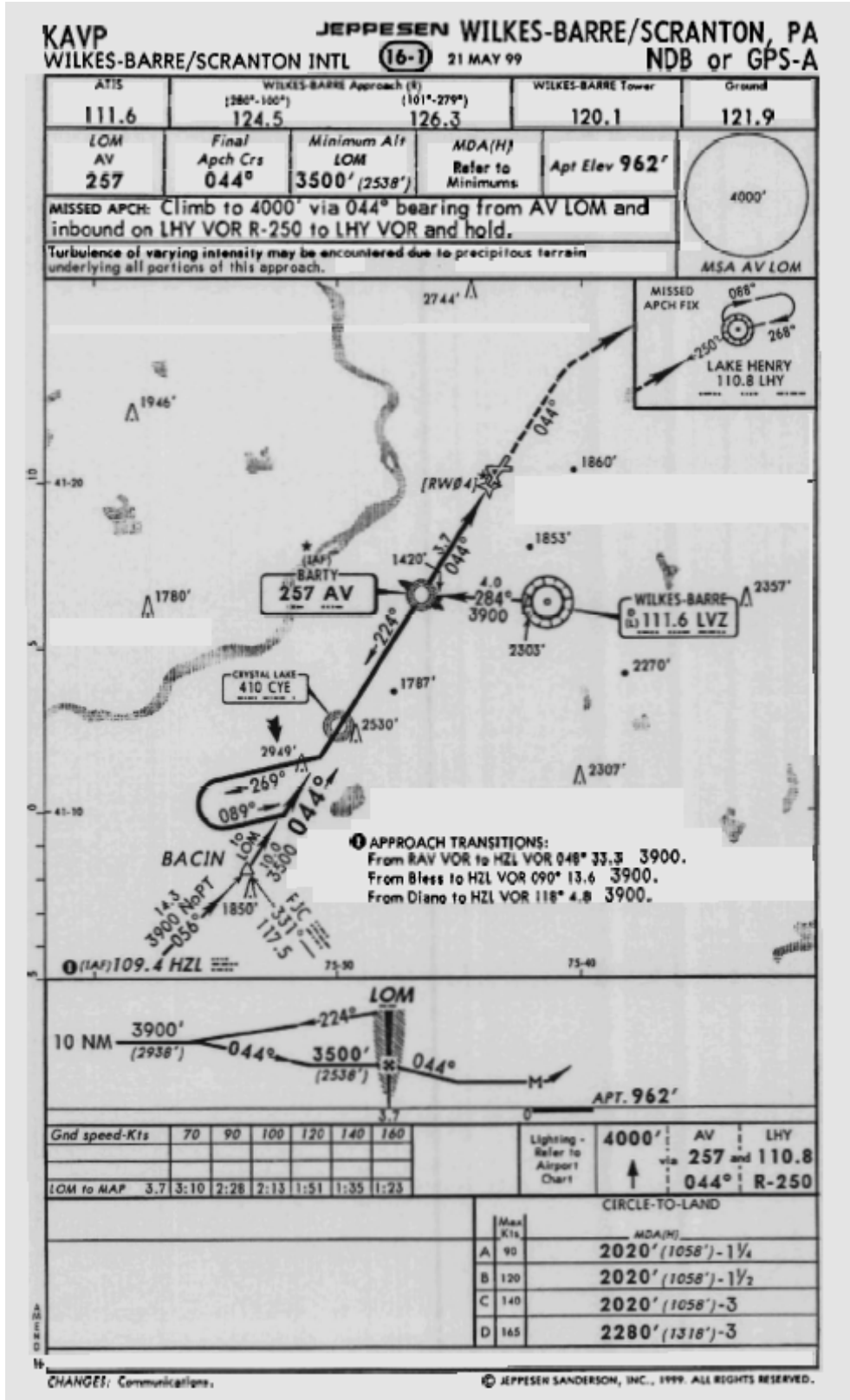
Background/Discussion: Typical ILS approach procedures contain a nonprecision FAF used for LOC-only procedures. This nonprecision FAF may be based on a facility, e.g., outer marker (OM) or locator outer marker (LOM), a DME fix, an intersection or a radar fix. When issuing vectors for an ILS approach, air traffic control (ATC) attempts to vector aircraft so as to intercept the LOC course approximately 2-3 miles outside the FAF. For this reason, the FAF is shown on ATC video maps and used by ATC in ground-to-air communication. Because of a variety of reasons, the LOC FAF is seldom located at the glide slope interception point (GSIP) or PFAF of the ILS approach. The PFAF is not named on the procedure chart, nor does ATC vector in relation to the PFAF. The FAA has started publishing three-dimensional RNAV approaches. These procedures will contain a FAF, which serves as the nonprecision FAF and PFAF. Procedure design logic and present criteria dictates that the RNAV FAF be placed at the vertical descent angle (VDA) interception point (analogous to the PFAF). However, this means that the RNAV FAF will, in most cases, not be coincident with the LOC FAF. ATC objects to non-coincidence of RNAV FAF and LOC FAF location, as well as resulting video map clutter caused by fix names in close proximity. ATC wants a single "gate" fix for vectoring and video display purposes. The following proposal is an outcome of an AFS/AVN/AAT meeting held June 28, 2000 in Oklahoma City.

Recommendations:

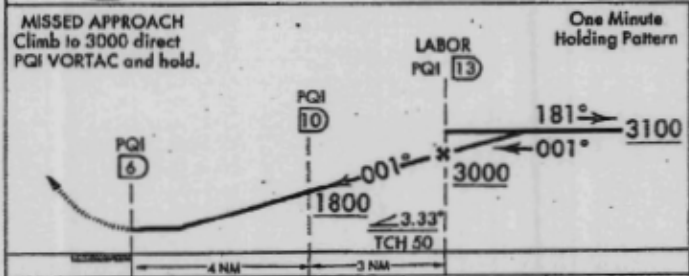
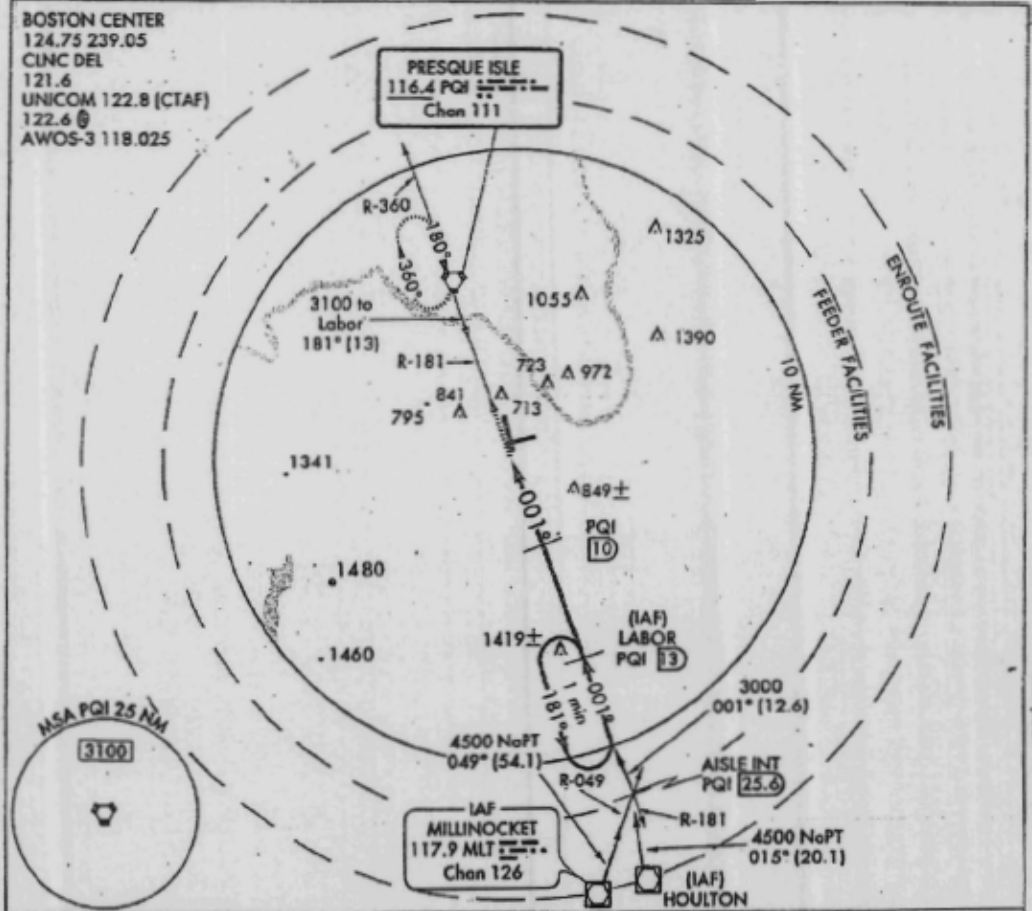
CASE 1. If the present LOC FAF is defined by DME, intersection or radar, the LOC FAF will be moved to coincide with the RNAV FAF which will be placed at the vertical descent angle interception point. An example is the ILS RWY 11 at Crescent City (CEC), CA. When a RNAV procedure is developed for this runway, the ILS procedure must also be amended to move SLAMM DME fix to the point where the 1700' MSL altitude intercepts the glidepath. In this case, SLAMM will be moved .1 - .2 NM away from runway 11 threshold. SLAMM will also be the RNAV FAF.

CASE 2. If the LOC FAF is defined by a facility such as a LOM, which cannot be moved, the present facility name will be assigned to the ILS PFAF. The RNAV FAF will be co-located with the ILS PFAF and share the common name. The facility will remain the LOC FAF and the facility identification will serve to mark the location for navigation database purposes. An example is the ILS RWY 25R at Livermore (LVK), CA. When a RNAV procedure is developed for this runway, the ILS procedure must also be amended to move REIGA to the point where the 2800' MSL altitude intercepts the glidepath. In this case, REIGA will be moved 1.2 NM away from runway 25R threshold.

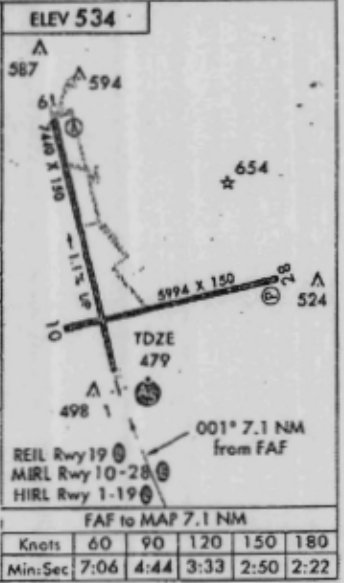
**NOT FOR NAVIGATION
FOR USE AT FAA AERONAUTICAL CHARTING FORM ONLY.**



Amdt 12A 00111 294
VOR/DME RWY 1 PRESQUE ISLE/NORTHERN MAINE REGIONAL ARPT AT PRESQUE ISLE (PQI)
 AL-331 (FAA) PRESQUE ISLE, MAINE



CATEGORY	A	B	C	D
S-1	1040-½ 561 (600-½)		1040-1 561 (600-1)	1040-1½ 561 (600-1½)
CIRCLING	1100-1 566 (600-1)	1160-1 626 (700-1)	1160-1¾ 626 (700-1¾)	1180-2 646 (700-2)



VOR/DME RWY 1 46°41'N-68°03'W PRESQUE ISLE, MAINE
 Amdt 12A 00111 PRESQUE ISLE/NORTHERN MAINE REGIONAL ARPT AT PRESQUE ISLE (PQI)

Amdt 34A 99140

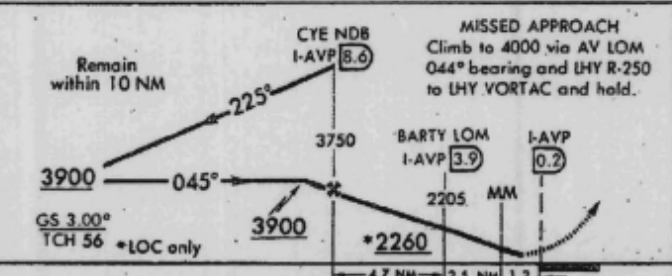
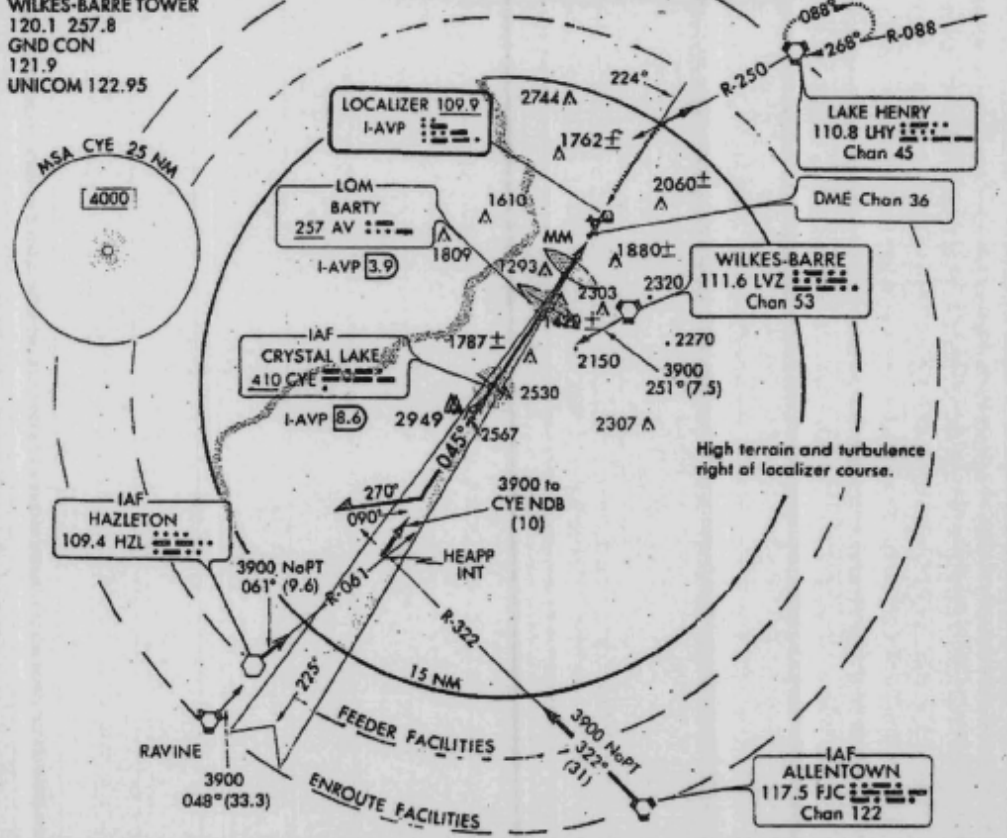
ILS RWY 4

AL-661 (FAA)

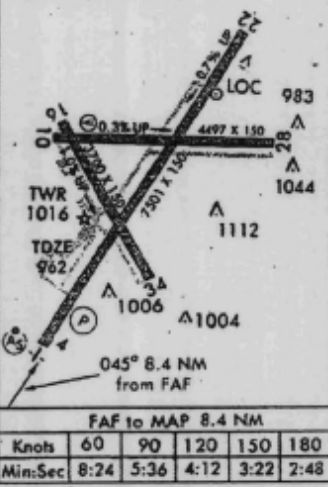
WILKES-BARRE/SCRANTON INTL (AVP)
WILKES-BARRE/SCRANTON, PENNSYLVANIA

ATIS 111.6
WILKES-BARRE APP CON
126.3 256.7
WILKES-BARRE TOWER
120.1 257.8
GND CON
121.9
UNICOM 122.95

ADF or RADAR REQUIRED



ELEV 962
HIRL Rwy 4-22
MIRL Rwy 10-28
REIL Rwy 10, 22 and 28



CATEGORY	A	B	C	D
S-ILS 4	1262/24 300 (300-½)			
S-LOC 4	2260/40 1298 (1300-¾)	2260/50 1298 (1300-1)	2260-2½ 1298 (1300-2½)	
CIRCLING	2260-1¼ 1298 (1300-1¼)	2260-1½ 1298 (1300-1½)	2260-3 1298 (1300-3)	2280-3 1318 (1400-3)
BARTY LOM/DME MINIMUMS				
S-LOC 4	1780/24 818 (900-½)	1780/40 818 (900-¾)	1780-2 818 (900-2)	1780-2¼ 818 (900-2¼)

ILS RWY 4

Amdt 34A 99140

41°20'N-75°43'W

WILKES-BARRE/SCRANTON, PENNSYLVANIA
WILKES-BARRE/SCRANTON INTL (AVP)

00-02 MEETING: This issue was submitted by Mr. Carl Moore, AFS-420. This issue was deferred to the next meeting due to time constraints.

01-01 MEETING: This issue was forwarded to the TERPS portion of the ACF. **CLOSED**
