

AERONAUTICAL CHARTING FORUM
Instrument Procedures Group
April 24, 2013
HISTORY RECORD

FAA Control # 13-01-308

Subject: RNAV (GPS) Approach Procedures That do not Have an LNAV Minimum Line Should Indicate "Alternate NA"

Background/Discussion: According to WAAS GPS AFMS and AIM 1-1-20 c.7. (emphasis is mine):

(a) Pilots with WAAS receivers may flight plan to use any instrument approach procedure authorized for use with their WAAS avionics as the planned approach at a required alternate, with the following restrictions. When using WAAS at an alternate airport, **flight planning must be based on flying the RNAV (GPS) LNAV minima line, or minima on a GPS approach procedure, or conventional approach procedure with "or GPS" in the title.** Code of Federal Regulation (CFR) Part 91 nonprecision weather requirements must be used for planning.

Many RNAV (GPS) Approach procedures do not have a LNAV minima line (example LPV only or LPV and LNAV/VNAV only), and these procedures should be noted as Alternate NA. An example procedure at Camarillo, CA (KCMA) is attached. Here are some others I found: Altoona, PA (AOO) RWY 3; Butte, MT (BTM) RWY 15; Concord, CA (CCR) RWY 19R; Charlottesville, VA (CHO) RWY 21; Cherokee, IA (CKP) RWY 36; Clinton, NC (CTZ) RWY 24; Flagstaff, AZ (FLG) RWY 21; John Day, OR (GCD) RWY 9; Half Moon Bay, CA (HAF) RWYS 12, 30; Whitefield, NH (HIE) RWY 10; Shirley, NY (HWV) RWY 24; Ithaca, NY (ITH) RWY 14; Mc Call, ID (MYL) RWY 34; Ord, NE (ODX) RWY 31; Homer, AK (PAHO) RWYS 3, 21; Selawik, AK (PASK) RWY 22; Somerset, KY (SME) RWY 5; Reid Hillview, CA (RHV) RWY 31R; Salinas, CA (SNS) RWY 31; Titusville, FL (TIX) RWY 18; Fort Payne, AL (4A9) RWY 22; Nahunta, GA (4J1) RWYS 1, 19.

Recommendations: Add "NA" to the alternate indication on the affected approach charts. Update FAA 8260-series form notes. Remove the reference in the alternate section of the TPP that includes the affected procedure(s).

Example:

CAMARILLO, CA
CAMARILLO (CMA) **RNAV (GPS) Rwy 8 ₁**
RNAV (GPS) Y Rwy 26 ₁
~~**RNAV (GPS) Z Rwy 26-₄**~~
VOR Rwy 26 ₂

1 NA when local weather not available.

2 Categories A, B, 1100-2; Category C, 1100-3.

Comments: This recommendation affects FAA Order 8260.19.

Submitted by: John Collins

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Date: February 20, 2013

Organization: GA Pilot

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CAMARILLO, CALIFORNIA

AL-680 (FAA)

RNAV (GPS) Z RWY 26

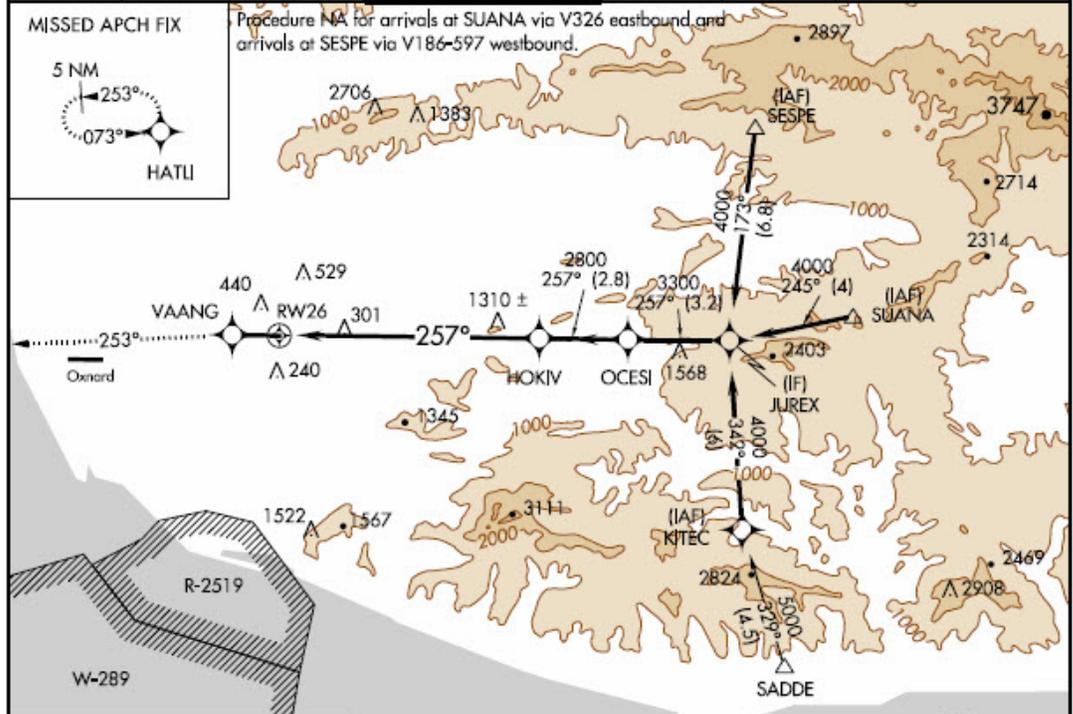
CAMARILLO (CMA)

WAAS CH 58202 W26A	APP CRS 257°	Rwy Idg 6013 TDZE 77 Apt Elev 77
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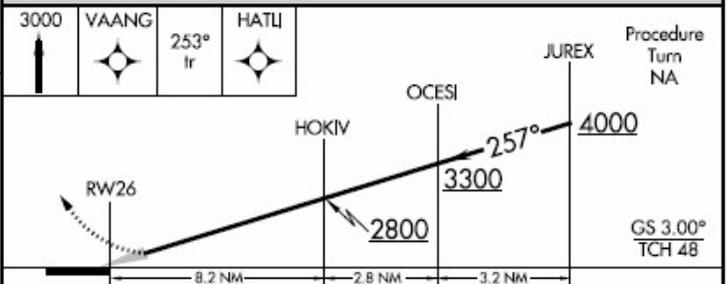
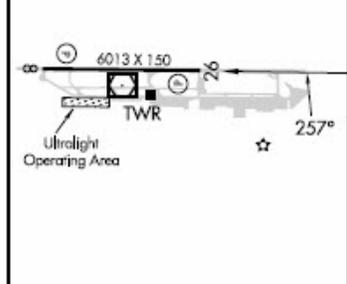
NA DME/DME RNP -0.3 NA.
If local altimeter setting not received, use Oxnard
altimeter setting and increase DA 18 feet.

MISSED APPROACH: Climb to 3000 direct VAANG
and via 253° track to HATLI and hold.

ATIS 126.025	POINT MUGU APP CON * 124.7 335.5	CAMARILLO TOWER * 128.2 (CTAF) 0 269.4	GND CON 121.8	CLNC DEL 121.8	POINT MUGU CLNC DEL 120.75 279.55
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ELEV 77	TDZE 77
△351±	



CATEGORY	A	B	C	D
LPV DA	327-¾		250 (300-¾)	

CAMARILLO, CALIFORNIA
Orig 12208

34°13'N-119°06'W

CAMARILLO (CMA)

RNAV (GPS) Z RWY 26

SW-3, 07 FEB 2013 to 07 MAR 2013

Initial Discussion - MEETING 13-01: New issue presented by John Collins, GA Pilot. John briefed that many RNAV (GPS) Approach procedures do not have a LNAV minima line; e.g., LPV only or LPV and LNAV/VNAV only, and therefore, should be noted as "Alternate NA". This recommendation is supported by the WAAS GPS Aircraft Flight Manual Supplement (AFMS) and AIM, paragraph 1-1-20 c.7, which states in part "...When using WAAS at an alternate airport, flight planning must be based on flying the RNAV (GPS) LNAV minima line, or minima on a GPS approach procedure, or conventional approach procedure with "or GPS" in the title." Catherine Majauskas, AFS-470, briefed that the FAA has reviewed the current requirements placed on aircraft GPS navigation systems with respect to alternate airport planning requirements. The FAA also studied the availability of GPS and Wide Area Augmentation System (WAAS) for both GPS and WAAS-based instrument approach procedures (IAPs) at destination and alternate airports. As a result, the FAA has updated the policy and provided clarification to enable additional flexibility for users while maintaining safety in the National Airspace System (NAS). Specifically, these changes will allow operators with GPS (non-augmented) navigation systems to plan for use of GPS-based IAPs at either the destination or alternate airport, but not both locations. Of particular note, in order to take advantage of this change, these operators will need to have aircraft with fault detection and exclusion (FDE) capability. Allowances for all operators have been broadened to address those navigation systems that incorporate a baro-VNAV input. In line with previous policy, WAAS equipped operators without baro-VNAV may still plan for LNAV at the alternate airport. This information was published as a Graphic Notice in the April 4, 2013 edition of the FAA Notices to Airmen Publication (NTAP) and a copy is provided here (). John emphasized that people are misinterpreting the reference; it must be clear in specifying the non-precision requirement. Catherine quoted the language from the NTAP, which states that it is still the pilot's responsibility to comply with Code of Federal Regulations, Title 14, Part 91, paragraph 91.169 regarding instrument flight rules alternate airport weather minima guidance for non-precision approach procedures. Lev Prichard, APA, stated that there are pilots that believe that if an approach has vertical guidance, it is a precision approach. Catherine noted that associated changes to the AIM and AIP are scheduled for this August. Work is in progress to update associated Advisory Circulars and other FAA Orders. Tom Schneider, AFS-420, stated that FAA Order 8260.19, paragraph 8-53b(3) was recently updated to emphasize that alternate minimums are authorized on RNAV (GPS) and RNAV (RNP) SIAPs. However, procedures that only contain LPV minimums cannot be used for determining an alternate. The issue will remain open until AIM and AIP changes are made. **ACTION: AFS-470.**

MEETING 13-02: Kel Christianson, AFS-470, stated that the information has been published in the AIM and recommended closing issue. John Collins, GA Pilot, disagreed, commenting that LPV-only approaches are vertically guided and since they do not have an associated non-vertically guided line of minima published, must be marked as ALT N/A. Tom Schneider, AFS-420, discussed John's concerns and advised of specific guidance that has already been incorporated into Order 8260.19 to alleviate them. John concurred the 8260.19 changes address his concerns; however, the AIM guidance is lacking. Kel stated he will take this issue back to Catherine Majauskas, the AFS-470 specialist working this issue, for action. **ACTION: AFS-470.**

MEETING 14-01: Kel Christianson, AFS-470, provided background on the issue. Information changed in the AIM, and John Collins, GA pilot and submitter of this recommendation, is satisfied with the change and agreed this recommendation can be closed.

Status: **Issue CLOSED**