

July 3, 2003

U.S. Department of Transportation  
Docket Management System  
400 7<sup>th</sup> Street SW, Room PL 401  
Washington, DC 20590

Re: *Notice of Proposed Rulemaking: Area Navigation (RNAV) and Miscellaneous Amendments (Partial Reopening of Comment Period)*  
FAA Docket No. 2002-14002  
68 Fed. Reg. 16992 (April 8, 2003)

Dear Docket Clerk:

American Airlines welcomes the opportunity to submit the following comments reference to *Notice of Proposed Rulemaking: Area Navigation (RNAV) and Miscellaneous Amendments*, FAA Docket No. 2002-14002.

American Airlines supports the existing efforts of the existing FAA / industry technical with regards to Area Navigation (RNAV) procedures and terminal area operations. In particular, the work of the Terminal Area Operations Aviation Rule-Making Committee ("TAOARC"), has impact on many of the issues specified in this NPRM and therefore these items should be relegated to this committee for review and implementation if appropriate. Further, the significant efforts put forth on publication of AC120-29A and AC120-28D by FAA, JAA, and industry should be utilized to the maximum extent possible.

The safety benefits associated with full utilization of modern airplane communication, navigation, and surveillance capabilities cannot be overstated and both of these ACs provide airlines with guidance and an evolutionary path appropriate for modern air transport operations. American Airlines supports the proposed changes contained in "RNAV NPRM – Detailed Comments and Recommendations; Recommended Text for Issuing an Amended Notice" which is attached.

Specific Comments to the Proposed Amendments:

1. Part 1- DEFINITIONS AND ABBREVIATIONS, Item 2, 77339
  - a. Remove the definitions of Area navigation high route, Area navigation low route, Category II operations, Category III operations, Category IIIa operations, Category IIIb operations, Category IIIc operations, Decision height, Minimum descent altitude, Nonprecision approach procedure, Precision approach procedure, and RNAV way point.

Comments:

The proposal definitions are confusing and unnecessary. In accordance with AC120-29A, American Airlines has adopted the terminology "Non-ILS" approach procedure in recognition of the high degree of accuracy of RNP RNAV equipped aircraft, particularly when coupled with vertical navigation (VNAV). Regulators and industry should continue to develop wording compatible with existing harmonized guidance, specifically, AC 120-28D, and AC 120-29A, to enable the implementation of future approach strategies without creating conflicts (as do the proposed changes).

2. Reference Approach procedure with vertical guidance (APV), Item 2, 77339

Comments:

Existing terminology is adequate for approach operations utilizing vertical path guidance. Creating an additional term for an already recognized capability presents a training and cost burden that's unnecessary. Do not incorporate APV verbiage; continue to evolve AC120-29A terminology as required to support RNP RNAV both laterally and vertically.

3. Reference Category I/II/III, Item 2, 77339

NPRM Proposal:

*Category II (CAT II) operation* is a precision instrument approach and landing with a decision height lower than 200 feet (60 meters), but not lower than 100 feet (30 meters), and with a runway visual range of not less than 1,200 feet (350 meters).

*Category III (CAT III) operation* is a precision instrument approach and landing with a decision height lower than 100 feet (30 meters) or no DH, and with a runway visual range less than 1,200 feet (350 meters).

*Category IIIa (CAT IIIa) operation* is a precision instrument approach and landing with a decision height lower than 100 feet (30 meters), or no decision height, and with a runway visual range of not less than 700 feet (200 meters).

*Category IIIb (CAT IIIb) operation* is a precision instrument approach and landing with a decision height lower than 50 feet (15 meters), or no decision height, and with a runway visual range of less than 700 feet (200 meters), but not less than 150 feet (50 meters).

*Category IIIc (CAT IIIc) operation* is a precision instrument approach and landing with no decision height and with a runway visual range less than 150 feet (50 meters).

Comments:

Utilize existing guidance in Advisory Circulars, AC-120-28D and AC 120-29A. If changes are desired they should be coordinated through the TAOARC, with other appropriate technical groups and committees.

4. Reference Decision altitude (DA), Item 2, 77339

Comments:

The terms DA(H) and MDA(H) are widely used and understood by the aviation community. Change to these terms does not add anything of value and simply creates confusion for no apparent benefit.

5. Reference Decision height (DH), Item 2, 77339

Comments:

The terms DH and DA are widely used and understood by the aviation community. Change to these terms does not add anything of value and simply creates confusion for no apparent benefit.

6. Reference Night, Item 2, 77340

Comments:

The term night is widely used and understood by the aviation community. Change to this term does not add anything of value and simply creates confusion for no apparent benefit.

7. Reference Nonprecision approach procedure (NPA), Precision approach procedure (PA), and Precision final approach fix (PFAF), Item 2, 77340

Comments:

The terms ILS approach and non-ILS approach as specified in AC120-29A are being incorporated by many airlines due to their relevance to existing fleet capabilities and for their future benefits with proliferation of RNP RNAV. The term non-precision should be dropped due to its antiquated and inappropriate application in modern jet transports. Advisory Circular 120-29A, Page 2, Paragraph 3.4 Category I, II, and III Terminology provides: "The use of the term "non-precision" has been dropped within this AC to reduce confusion which exists with use of this term with current and future systems and authorizations, particularly with Vertical Navigation (VNAV) and Area Navigation (RNAV), and with other approaches that may incorporate the use of barometric VNAV to provide a stabilized descent path to a runway." It seems appropriate to continue the policy contained in AC 120-29A, rather than to continue to include them in the regulation.

8. Reference Abbreviations and symbols for APV, NPA, and PA, Item 3, 77340

Comments:

Existing terminology in AC120-29A and AC120-28D make the proposed terms unnecessary and confusing. Additionally, future applications using AC120-29A terminology and concepts may be inappropriately constrained by these definitions.

9. Reference §91.177, Minimum altitudes for IFR operations (a)(2)(i), and (a)(2)(ii), Item 18, 77341

Comments:

Applications should allow the inclusion of RNP values, and not just a specific value of 4 nm for all instances. When applicable navigation requirements are required the ability to reduce the acceptable tolerances should be offered or allowed due to increased navigation accuracy prescribed by applying RNP requirements.

10. Reference §121.99 Communications facilities (a), Item 38, 77344

Comments:

The limitation of four-minute voice communications between the airplane and dispatch is arbitrary and unnecessary, especially in light of the fact that it is based on a 25 year old memorandum written regarding communications between Southern Airways flights and their dispatchers. The NPRM should be worded to require communications "as soon as practicable" over the entire route. This 4 minute interpretation fails to address the reality of air operations in that voice communications in remote areas which rely on HF are frequently unreliable or the fact that CPDLC, ACARS, and SATCOM are highly reliable. In US airspace in particular, the use of ACARS for dispatch communications is the preferred tool for many flight crews in lieu of the lengthy process of voice patches, ARINC support, etc.

This issue should be addressed by the TAOARC for future recommendations and implementation if appropriate. Utilization of the 1977 FAA memorandum and its initial narrow

applicability to a blanket policy for all operators is inappropriate. Full exploitation and implementation for datalink communications (ACARS VHF, HR, or SATCOM) and SATCOM voice equipage should be encouraged by the FAA as opposed to a mandate for voice communications with unrealistic limitations.

11. Reference §97.10 General, 77333

Comments:

This reference should be maintained. Since future RNP RNAV implementation in the US and abroad may not be based on TERPS criteria, this guidance may be needed in the future.

12. Reference §91.175f

Comments:

The proposed revision to 91.175(f) implies that only an all-engine departure procedure may be flown. In the event of an engine failure, the crew should be allowed to fly a special engine-out departure procedure as evaluated and published by individual airlines.

(Signed)

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