AIRCRAFT OWNERS AND PILOTS ASSOCIATION
421 Aviation Way • Frederick, MD 21701-4798
Telephone (301) 695-2000 • FAX (301) 695-2375
www.aopa.org

April 6, 2005

Mr. Thomas Accardi
Federal Aviation Administration
DOT/FAA Mike Monroney Aeronautical Center
National Flight Procedures Office
6500 S. MacArthur, Building 5 (ANF-1), Room 101
Oklahoma City, OK 73169.

Re: Proposed Cancellation of Non-Directional Beacon Instrument Flight Procedures

Dear Mr. Accardi,

The Aircraft Owners and Pilots Association (AOPA), representing over 400,000 members who operate 210,000 aircraft throughout the United States, supports the principle of eliminating redundant and underutilized Non-Directional Beacon (NDB) procedures. With the letter, AOPA offers its recommendations on the Federal Aviation Administration's (FAA's) list of NDB approaches being considered for cancellation, as published in the March 3, 2005 Federal Register. AOPA's recommendations fall into two categories; the first category is based on AOPA's review of the FAA criteria for cancellation and the second is based on AOPA member feedback on the list.

In a recent survey, AOPA asked members the following question: *If an airport runway is served by more than an NDB approach (i.e. VOR/GPS/LOC) approach, would it be acceptable for the FAA to decommission the NDB approach?* An overwhelming majority stated that this was acceptable, indicating that pilots generally recognize the fact that some NDB approaches are no longer needed. This is not surprising considering the fact that NDB's predate World War II and could be characterized as "antique" technology. However, members did note that in some instances, specific NDB approaches offer the lowest minimums at their airport and this must be addressed before the NDB procedure is cancelled.

Additionally, before a widespread move to cancel NDB approaches, the FAA needs to shift the pilot testing and evaluation emphasis away from NDB procedures. AOPA members indicate that because the FAA still uses practical test standards that are predicated on NDB's, that many approaches are used extensively for flight training and airman testing. The FAA needs to eliminate its continued emphasis on testing NDB navigation so that flight schools aren't forced to teach NDB approach procedures.

Based on member input and our own analysis, AOPA submits the attached recommendations. Table one lists 25 approaches that AOPA recommends the FAA retain because they do not meet the FAA's stated criteria for elimination, namely

"procedures …… at runway ends that are also served by an RNAV procedure and a second ground-based procedure." Table two is a list of NDB approaches that AOPA received multiple member comments on, regarding the hardship that the approaches cancellation would cause for local operations.

AOPA appreciates the opportunity to support the FAA in its efforts to reduce the cost of providing air traffic services by eliminating redundant or outdated NDB approach procedures. If you have any additional questions on these comments, please do not hesitate to contact Randy Kenagy, Senior Director Advanced Technology at 301-695-2211.

Sincerely,

Melissa K. Rudinger
Vice President
Regulatory Affairs

AOPA Comments to Proposed NDB Approach Cancellation

AOPA reviewed the list of NDB approaches to ensure that the FAA's stated criteria for cancellation, namely, *"procedures …… at runway ends that are also served by an RNAV procedure and a second ground-based procedure,"* were satisfied. Just as importantly, it is critical that the cancellation of the NDB approach at an airport should not result in a loss of operational capability due to higher minima in the remaining procedures. Therefore, AOPA compared the minimum descent altitude (MDA) supported by each NDB approach proposed for cancellation to those of the other ground-based and GPS-based approach procedures to identify cases where the NDB approach provided the better MDA.

Table 1 summarizes the results of AOPA's analysis and lists those airports where the criteria identified above are not satisfied. It is organized by state and airport. The "Approach" column is the title of the specific approach in question, and the "Reason" column provides a brief shorthand explanation for why the approach failed to meet the criteria. For example, the notation "VOR + 120" means that the VOR approach to the same runway has an MDA that is 120 feet higher than the NDB approach. In some cases, like RTN in New Mexico, the MDA penalty for the cancellation of the NDB procedure can be quite severe (1000 feet MDA increase). The notations "No GPS 35L" or "GPS 35 Only" indicate that the runway is not suitably served by the required ground-based *and* GPS-based approaches.

** Those airports/approaches which were also the subject of at least one comment from AOPA member-respondents are identified by the double asterisk (**) next to the state/airport entry.

Table 1

NDB Approaches Not Meeting Criteria for Cancellation

State (Airport)	Approach	Reason
1. CA (WJF)	NDB-C	VOR-B +220
2. CA (SCK)**	NDB Rwy 29R	GPS +20
3. CO (COS)**	NDB Rwy 35L	NO GPS 35L
4. DE (EVY)	NDB or GPS-A	VOR +380
5. FL (PNS)**	NDB Rwy 35	GPS 35 ONLY
6. IA (EST)	NDB Rwy 34	VOR +40
7. ID (IDA)**	NDB Rwy 20	GPS +60
8. IN (HNB)	NDB Rwy 27	Non-DME VOR +160
9. KY (FGX)	NDB Rwy 25	GPS +40 OK
10. KY (LEX)	NDB Rwy 4	RNAV/GPS +60 (LNAV)
11. MI (ACB)**	NDB Rwy 2	VOR +120
12. MT (MLS)**	NDB Rwy 4	RNAV/GPS +100 (LNAV)

State (Airport)	Approach	Reason
13. NC (MRH)	NDB Rwy 21	No other ground based straight-in approach
14. NC (MQI)**	NDB Rwy 17	VOR +420 (Non DME)
15. NE (CDR)	NDB Rwy 20	VOR/DME +580
16. NH (DAW)	NDB Rwy 33	No straight-in ground based. Also, VOR/DME-A circling is +220
17. NM (RTN)**	NDB Rwy 2	VOR/DME +1000
18. NM (ROW)	NDB Rwy 21	GPS +40
19. NY (06N)	NDB Rwy 26	No straight-in ground based. Also, VOR 8-CIRCLE is +600
20. OK (MKO)	NDB Rwy 31	VOR +60
21. OK (OKC)**	NDB Rwy 17R	RNAV/GPS +80 (LNAV)
22. PA (UKT)**	NDB or GPS Rwy 29	VOR +140 w/o DME
23. PA (RDG)**	NDB Rwy 36	NO GPS 36
24. TX (11R)**	NDB Rwy 16	VOR/DME +20
25. TX (HYI)	NDB Rwy 13	RNAV/GPS +40 (LNAV)

AOPA also solicited email comments from its membership on the proposed list of NDB approach procedure cancellations, and many responses were received. Most of the responses supported retention of a specific NDB approach procedure at an airport, while several others provided non-airport-specific support for NDB approaches in general. It should also be noted, however, that there was a sizable minority that supported the elimination of NDB approaches (usually qualified by an accelerated establishment of GPS-based procedures).

For those respondents citing a need to keep one or more NDB approaches on the list, the most-often stated reason was to ensure opportunities for NDB procedure training and proficiency. To a slightly lesser degree, other respondents stated that they either relied routinely on a procedure for IFR operations, or felt that it was an essential back up in IFR for the possible failure of a primary ground-based navigation aid, such as a localizer or VOR. This latter sentiment was especially true for those respondents who do not fly aircraft with approach-capable GPS equipment.

Any reduction in NDB approach service should be taken with great care to ensure that comparable, alternative approach procedures are in place so that users are able to continue their flight operation (be it for training or actual IFR) with minimal adverse cost or operational impact. However, the support expressed for several candidate NDB approach procedures by multiple users suggests that those procedures need to be retained. Table 2 lists those airports and procedures for which we received multiple responses requesting retention, indicating such support.

Table 2

Airports/Approaches For Which AOPA Received Multiple Comments

State (Airport)	Approach
AR (HOT)	NDB 5
AZ (CHD)	NDB 4R
CA (FAT)	NDB 29R
CA (FCH)	NDB or GPS-B
CA (LGB)	NDB 30
CA (SAF)	NDB 2
CA (SCK)	NDB 29R
CA (SNA)	NDB 1L, NDB 19R
CO (APA)	NDB 35R
CO (COS)	NDB 35L
CO (FNL)	NDB 33
CO (PUB)	NDB 26R, 8L
CT (MMK)	NDB 36
CT (OXC)	NDB 36, 18
FL (OCF)	NDB 36
FL (PIE)	NDB 17L
FL (PNS)	NDB 35
GA (TBR)	NDB 32
IA (CID)	NDB 9
IL (DKB)	NDB 27
IL (RFD)	NDB 1
MA (PVC)	NDB 25
MD (GAI)	NDB 14
MI (ACB)	NDB 2
NC (IPJ)	NDB or GPS 23
NC (MQI)	NDB 17
NE (EAR)	NDB 36
OH (UNI)	NDB 25
PA (UKT)	NDB 29
TN (MRC)	NDB 24
WA (BLI)	NDB 16
WA (PAE)	NDB 16R