LAX Community Noise Roundtable

FAA’s Proposal of a Stage 5 Aircraft Noise Standard

March 9, 2016
On January 14, 2016, the Federal Aviation Administration (FAA) issued a Notice of Proposed Rulemaking (NPRM) that would establish a Stage 5 noise standard for aircraft operating in the United States (U.S.).

The Stage 5 noise standard would be cumulatively:

- 17 decibels (dB) lower than Stage 3 noise levels, and
- 7 dB lower than Stage 4 noise levels

If promulgated, the new Stage 5 standard would make the U.S. aircraft noise standards consistent with the International Civil Aviation Organization (ICAO) Chapter 14 noise standard, which became effective July 2014.
The Stage 5 noise standard would be effective on:

- December 31, 2017 for new large subsonic jet aircraft with a maximum takeoff weight of 121,254 pounds or greater
- December 31, 2020 for new regional jets and turboprop aircraft with a maximum takeoff weight less than 121,254 pounds

FAA makes it clear in the NPRM that it is not proposing a phase out of Stage 3 or Stage 4 aircraft with this proposed action.

FAA states, “There are no operational restrictions nor production cut-offs on the use of Stage 3 or Stage 4 airplanes in the United States.” FAA adds, “The adoption of the Stage 5 noise standard for new airplane type designs does not impact either of these existing noise standards that apply to the production or operation of current airplane models in the United States.”
Unrelated legislation introduced in December 2015 known as the Silent Skies Act (H.R. 4171), would require (if passed) the gradual phase out of Stage 3 aircraft by 2037.

An earlier version of the Silent Skies Act failed during the previous session of Congress.
BRIEF HISTORY

• 1969 – First aircraft noise certification standards, Title 14, Code of Federal Regulations Part 36, established the Stage 2 noise standards effective December 31, 1969

• 1977 – FAA amended 14 CFR Part 36 to provide three stages, each with specified noise limits. Applicants for new type certificates after November 5, 1975 were required to meet Stage 3 noise limits

• 1985 – The cutoff date for the operation of Stage 1 four-engine jet aircraft was January 1, 1985

• 1990 – Aircraft Noise and Capacity Act (ANCA) set the phase out of large Stage 2 aircraft greater than 75,000 pounds as December 31, 1999
BRIEF HISTORY

• 2005 – 14 CFR Part 36 is amended to establish Stage 4 noise limits, which became effective for new airplane designs after January 1, 2006. It also allowed for a cumulative reduction at the three measurement locations (flyover, lateral, and approach)

• 2012 – Congress prohibits the operation of Stage 2 aircraft less than 75,000 pounds after December 31, 2015

• 2016 – All jet aircraft operating in the U.S. comply with Stage 3 or Stage 4 requirements. FAA proposes a Stage 5 noise standard, which would become effective December 31, 2017
FAA’s Proposal of a Stage 5 Noise Standard

Cumulative EPNdB under Stage 3 Limits versus Maximum Certificated Takeoff Weight

Source: HMMH 2013
FAA’s Proposal of a Stage 5 Noise Standard

BENEFITS

• Raises the bar for aircraft noise reduction for aircraft manufactured and operated in the U.S.

• Synchronizes U.S. and ICAO noise standards
  – Eliminates the U.S. as a possible safe haven for aircraft not in compliance with Chapter 14 standards

• Prevents backsliding by newly manufactured aircraft

• Universally supported by airlines, aircraft manufacturers, and airport operators
POTENTIAL CONCERNS

• The proposed cumulative reduction over Stage 4 noise levels is modest and can be met by many aircraft operating today.

• However, the new standard represents several years of hard work by ICAO’s Committee on Aviation Environmental Protection (CAEP), U.S. airport representatives through ACI-NA, engine and aircraft manufacturers, and researchers, and was the best that could be achieved to ensure a new Chapter 14 noise standard was adopted in a timely manner.

• The NPRM does not contain a phase out of Stage 3 or Stage 4 aircraft.
RECOMMENDATIONS

• The benefits of the adoption of the proposed Stage 5 noise standard far outweigh the concerns

• If the Roundtable members agree, they could authorize the Chairman to prepare a letter to the FAA supporting the adoption of the proposed Stage 5 noise standard

• The Roundtable members may wish to consider recommending that FAA include a Stage 3 phase out schedule with its new Stage 5 noise standard
HOW TO SUBMIT COMMENTS

- Go to [www.regulations.gov](http://www.regulations.gov) and follow the directions for submitting your comments online

- Mail your comments to:
  
  M-30  
  US Department of Transportation  
  1200 New Jersey Avenue SE  
  Room W12-40, West Building Ground Floor  
  Washington, DC 20590-00001

- FAX your comments to: 202-493-2251

- The deadline for submitting public comments is April 13, 2016

- Comments must reference docket number FAA-2015-3782
Questions?