



LAX Community Noise Roundtable

Work Program Item C4:
Update on ICAO/CAEP Aircraft Noise
Stringency Standards

March 13, 2013

Update on ICAO/CAEP Aircraft Noise Stringency Standards



- **The International Civil Aviation Organization's (ICAO) Committee on Aviation Environmental Protection (CAEP) formally meets periodically (about every three years) to develop recommendations on aircraft environmental standards including aircraft noise**
- **CAEP's ninth formal meeting (CAEP 9) occurred in Montreal, February 4-15 2013**
- **Potential new aircraft noise certification standards were a focus of CAEP 9's discussions**



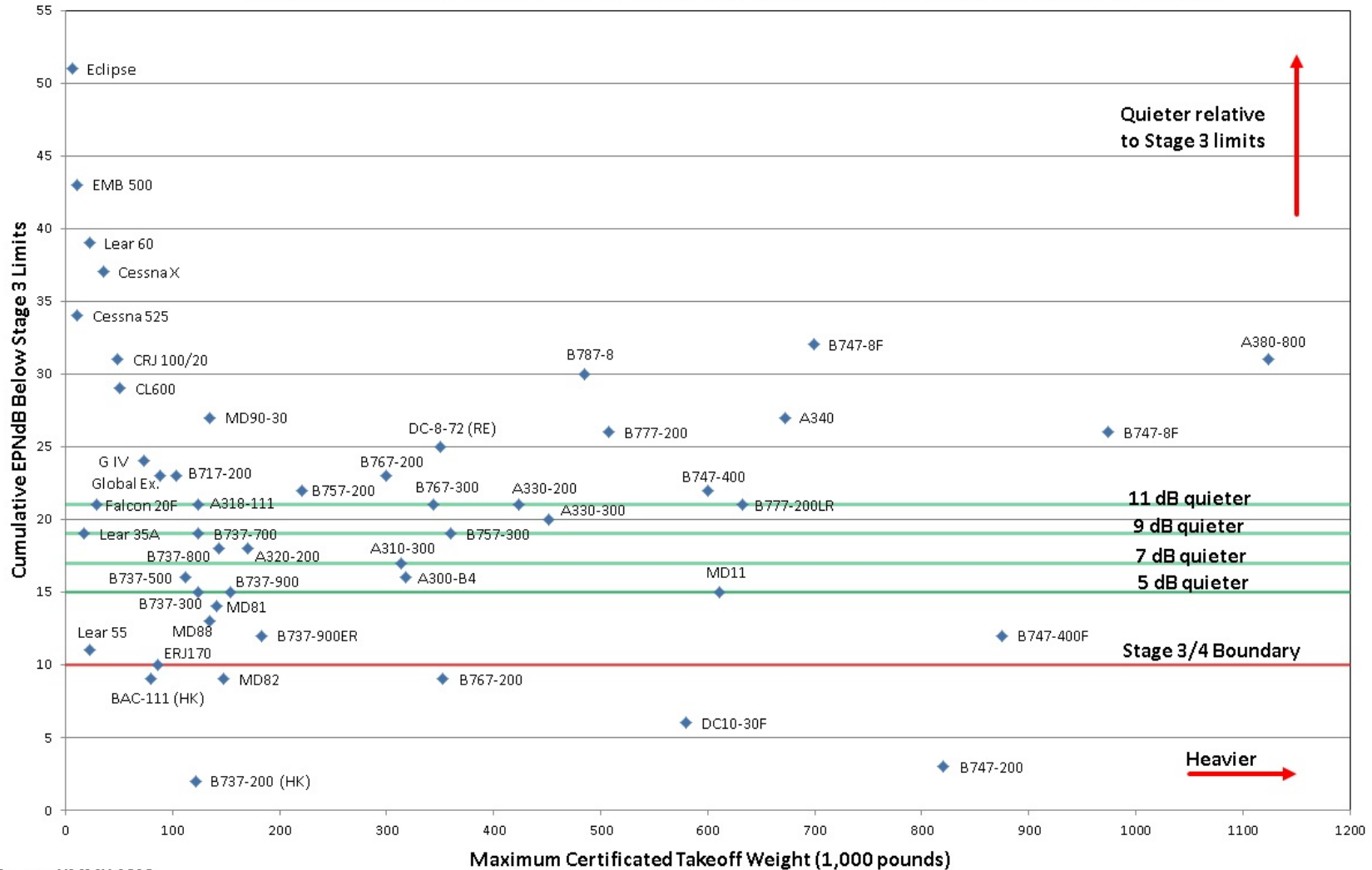
- **The current Chapter 4/Stage 4 aircraft noise standard recommended by CAEP 5 in 2001 became effective on January 1, 2006**
 - The gap between the recommendation and effective date allows aircraft and engine manufacturers time to implement the new technology required to meet the new standard
- **The airlines/aircraft manufacturers were advocating for Chapter 4 standards minus 5 EPNdB (Effective Perceived Noise Level in Decibels)**
 - Concerned that more stringent requirements could be technically difficult to achieve, and
 - Could undermine the market for some aircraft currently in production
- **Airports, through ACI World, were advocating for Chapter 4 standards minus 9 EPNdB**
 - Believed that a less stringent requirement could allow for backsliding below some of the current models being produced
 - Need to push for high noise stringency levels as aircraft operations continue to increase and airports need to expand to accommodate future growth

Update on ICAO/CAEP Aircraft Noise Stringency Standards



HMMH HARRIS MILLER MILLER & HANSON INC.

Cumulative EPNdB under Stage 3 Limits versus Maximum Certificated Takeoff Weight



Source: HMMH 2013



- **CAEP 9 recommended that ICAO adopt a new, more stringent aircraft noise certification for new aircraft designs**
 - The new standard would reduce the noise from new aircraft types by 7 EPNdB relative to the Chapter 4/Stage 4 standard that was adopted in 2001
 - New noise standard would go into effect in 2017 for large aircraft and in 2020 for small aircraft
- **Airports, Aircraft Manufactures, and Airlines universally praised the CAEP 9 noise stringency recommendation**
 - ACI-NA said, it “fully supports CAEP’s recommendation on the new noise standard of Chapter 4 minus 7 dB, to be implemented in 2017”
 - A4A stated, “CAEP’s recommendation of this new standard, which is even more stringent than the cost-effectiveness analysis supported, will bring further, significant noise reductions from the next generation of aircraft”
- **The recommended new noise standard will now go to ICAO for review in their spring sessions**
 - “This new noise standard is an important step for aviation and will provide a much quieter environment for the many communities living in proximity to the world’s airports,” said ICAO Secretary General Raymond Benjamin