

It has been a great honor to contribute a sample of my invention Tri-Pad Airbearing to the Noesis Museum of Science and Technology in 2016. A recent video shows Boeing engineers demonstrating an extreme corner of the flight envelope for a 747 jumbo jet going down the runway with the tail and belly touching the ground without takeoff while essentially airborne. Miniaturize the 747 jet by 25 billion times to about 10 mg for this Tri-Pad Airbearing slider in a read-write head to perform proximity recording with a flux sensor on a rotating data disk. The gap spacing between the trailing edge of the airbearing containing the read-write sensor needs to maintain minimum spacing of mathematically zero for maximum recording efficiency. The roughness of the head-disk interface prevents this ideal situation. The Tri-Pad Airbearing of this invention succeeds in achieving a gap spacing within the height of the roughness of the disk, sustaining the wear of the numerous collisions while maintaining airbearing aerodynamic stability, the functional integrity of the read-write head and disk for the life of the product with data integrity for critical mission such as bank data. Each head travels over a round trip from earth to moon in the product design. Eighty million such heads were used in hard disk drives in the 1990's. This would illustrate the invention in your archive and online library.

<https://www.youtube.com/watch?v=BWwUTJM3jbA#t=199.701>

Sincerely,
Chak Man Leung
(Leung Chak Man 梁澤民)
