

Decoupling Control of Fault-Tolerant Magnetic Bearings

Uhn Joo Na

Research Engineer

Alan B. Palazzolo

Professor

*Texas A&M University, Mechanical Engineering
College Station, TX 77843-3123*

Albert F. Kascak

U.S. Army at NASA Glenn

21000 Brook Park Rd., Cleveland, Ohio 44135

ABSTRACT

A magnetic bearing even with multiple coil failure can produce the same decoupled magnetic forces as those before failure if the remaining coil currents are properly redistributed. These results can be achieved with simply replacing the appropriate distribution matrices, T and W , shortly after coils fail, without modifying feedback control law.

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