1981d

"Inflight Magnetometer Calibration and Attitude Determination for Near-Earth Spacecraft," G. M. Lerner and M. D. Shuster, *Journal of Guidance and Control*, Vol. 4, No. 5, September–October 1981, pp. 518–522.

This work assumed that the spacecraft attitude was known from the measurements of sensors other than the vector magnetometer, which led to a simple linear estimator for the magnetometer bias, the sensitivity matrix for the magnetic field and the sensitivity matrix for control inputs. The journal article contains all of the material from the earlier conference report (1979a) except for some figures illustrating the effect of discretization (analog-to-digital conversion) of the signal.

Because this work assumes that the spacecraft attitude is known, the estimation of the magnetometer calibration parameters considered becomes a simple linear-quadratic-gaussian estimation problem.

Superseded 1979a