

The MR Subcommittee of the AAPM Imaging Physics Committee (IPC) has recently completed a revision of the previous AAPM TG1 and TG6 reports on MR acceptance testing and quality assurance. The report of the MR Subcommittee has been approved by the IPC and will be available electronically (<http://www.aapm.org/pubs/reports/>). In this session of the MR continuing education course, the contents of the report will be presented. Recommendations regarding testing of magnetic and radiofrequency (RF) shielding will be followed by recommendations on specific acceptance tests of magnetic field homogeneity, the RF subsystem (calibration, stability), the gradient subsystem (calibration, eddy current compensation), combined subsystems (slice thickness and spacing), global system performance (SNR, uniformity, high and low contrast resolution), and advanced tests (MR spectroscopy, echo planar imaging).

Objectives: 1) Understand the requirements for MR site and system acceptance tests, 2) Review recommended MR site and system acceptance testing procedures, including phantom selection, data acquisition, data analysis, and reporting, 3) Review recommended action criteria for both standard imaging options and advanced imaging and spectroscopy options.