VLBA ACQUISITION MEMO #234

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To: VLBA Data Acquisition Group

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Subject: Measurement of D.C. offsets from sampler

Early measurements of D.C. offsets from Pie Town tapes showed very large D.C. offsets (~10%) which are now suspected to have been produced by the formatter (errors in cross-point switch which occur when many tracks are assigned to one A/D channel). More recent measurements on 2 A/D channels (using DAR #9) show that D.C. offsets are no larger than expected and are less than 1.0% at the nominal 0 dBm input level of the sampler. Figure 1 shows the results of measurements at the nominal and reduced sampler input levels. While there is provision in the sampler module for the installation of resistors to adjust the offsets none of the samplers have yet been adjusted. In the future, samplers could be adjusted for lower D.C. offset if needed - see VLBA Acquisition Memo #218.

