Improved Proton Injection into HERA via PETRA Optics Trickery: Are the Prospects Real or Imaginary?, K. BALEWSKI, R. BRINKMANN, B. PARKER, DESY - Possibilities for optics changes in the PETRA ring for achieving improved proton injection into HERA are examined in this paper. By reducing the average dispersion, $<\eta>$, at the PETRA top energy, 40 GeV, the bunch length for protons transferred into HERAp can be shortened without having to increase the PETRA RF-voltage and the number of "satellite" protons captured in nearby HERA 208 MHz buckets thereby reduced. Also with alternate PETRA extraction matching conditions the effective aperture of the transfer line can be increased by reducing β- and η-peaks at critical points. Finally means for studying and possibly mitigating anomalous emittance growth during the PETRA ramp are proposed. With 29 variables (i.e. independent PETRA quadrupole circuits) a wide variety of ring optics solutions are found to be possible and while no "magic fixes" have yet been uncovered, a series of options are outlined here that do hold promise of non-trivial improvements in overall PETRA/HERA performance. Results of recent machine studies are presented and preliminary plans for 1996 operations and future machine studies are discussed.