1067-05-920   **Don Wagner*** (`don.wagner@navy.mil`), 875 N. Randolph Street, Arlington, VA 22203.
Delta-Wye Reduction of Almost-Planar Graphs.

A non-planar graph G is *almost planar* if, for every edge of G, either its deletion or contraction produces a planar graph. Evidently, both K_5 and $K_{3,3}$ are almost planar. It is shown that for any almost-planar graph G, there exists sequence of almost-planar graphs, starting with G and ending with $K_{3,3}$, such that each graph in the sequence is obtained from its predecessor by a series reduction, a parallel reduction, or a delta-wye exchange. Analogous results for other classes of graphs and matroids are considered (Received September 16, 2010)