TRAVERSE ERROR ANALYSIS

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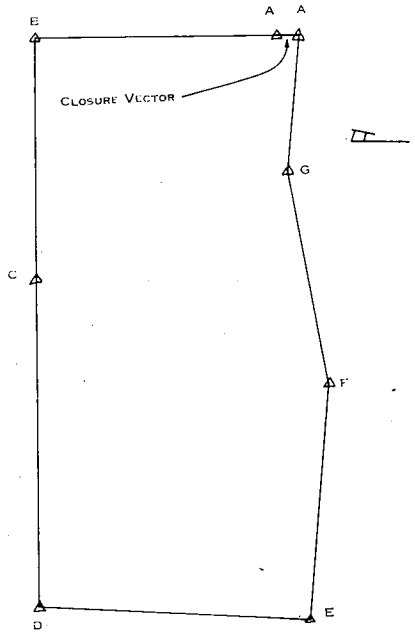
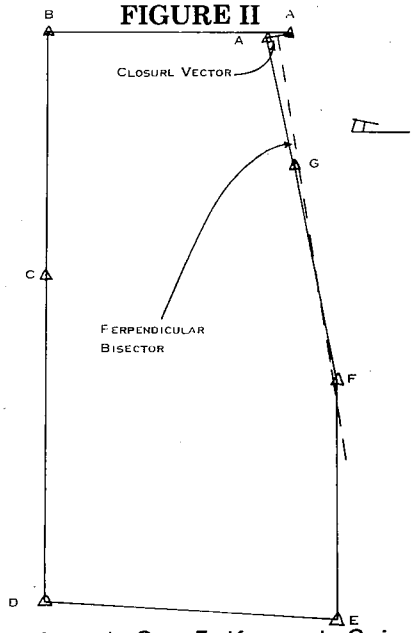
Abstract: Development, illustrations and a method are given for identifying the magnitude, direction and location of errors and combinations of errors in a traverse loop.

FIGURE I



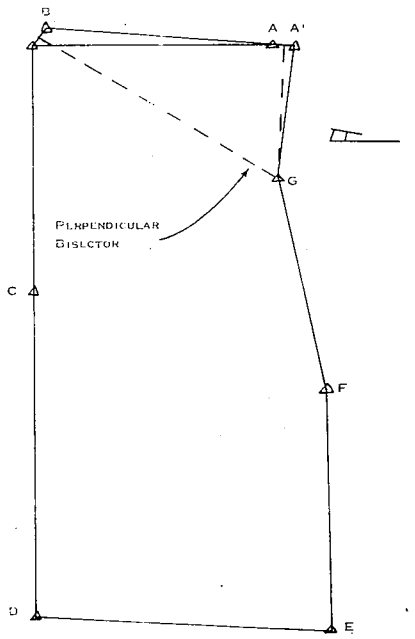
Error in Distance. AB too short or DE too long. Its magnitude is the same as AA'.

FIGURE II



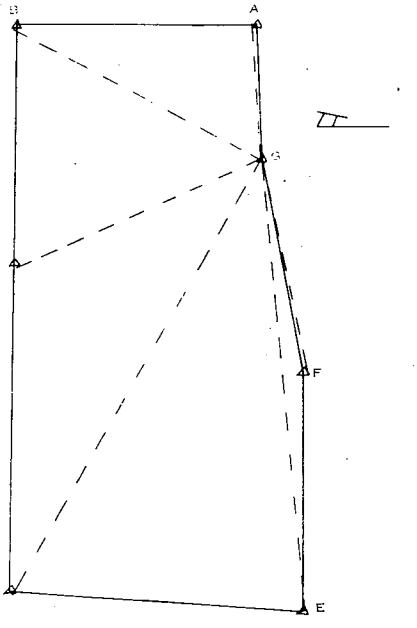
Error in angle G or F. If at angle G, its magnitude is the same as one-half angle AGA'. If at angle F, its magnitude is the same as one-half angle AFA'.

FIGURE III



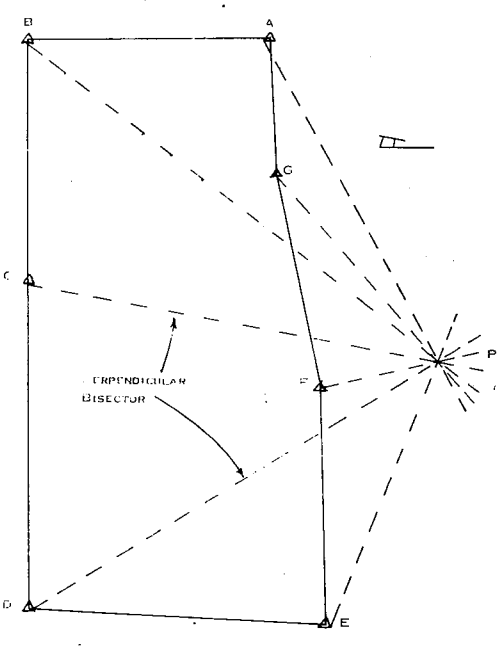
Angular error at G. Magnitude one-half angle AGA' or one-half angle AGA'.

FIGURE IV



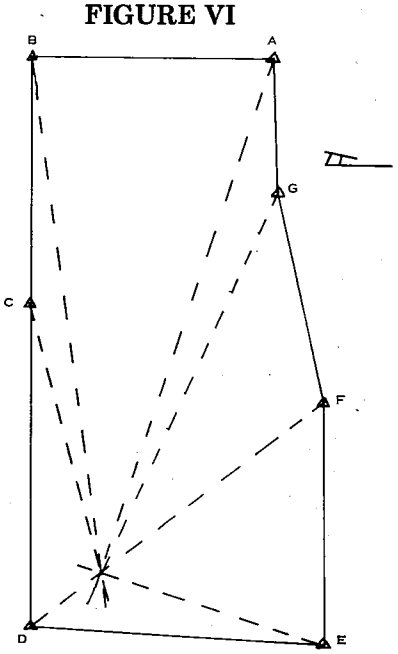
Angle G has an angular error.

FIGURE V



Combined distance and angular error. Distance error in line FG, magnitude GG'. Angular error at F, magnitude one-half FPF'.

FIGURE VI



Angular errors at angles F and D. Magnitude not determined.