SUMMARY OF THE RESULTS

Calculations were made showing percent error between selected control points of the Herrman map and the same points on contemporary NOS nautical charts (see page 91 in the appendix). The control points were selected based on stable natural landforms, as analyzed by shoreline movement studies, and settlement locations. The distortions calculated yielded an overall average error of over five percent. This is an average error showing distortion or poor topographic surveying results evident in maps of the time period. Most other maps of this period have a range of overall average error of 5% to 11%. The Herrman map can now be described in terms of its accuracy relative to other historical maps providing numerical results.

The amount of map distortion in the Herrman map is shown graphically by Figure 17. The latitude and longitude grid lines of a Mercator projection are straight and parallel and intersect at 90°. However, the latitude and longitude grid lines illustrated on the Herrman map in Figure 17 indicate the distortion as compared to the contemporary graticule of the same area. The image area of the map displays the shoreline as distorted since the grid lines in this projection should be parallel straight