

Figure 2-36. Zanesville VOR/Victor Airway 214.

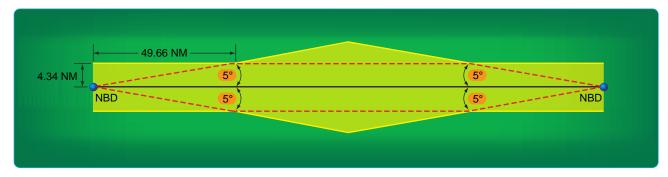


Figure 2-37. LF/MR airway width.

factor. The pilot/aircraft information component of these criteria includes pilot ability to track the radial and the flight track resulting from turns at various speeds and altitudes under different wind conditions. The navigation system information includes navigation facility radial alignment displacement, transmitter monitor tolerance, and receiver accuracy. All of these factors were considered during development of en route criteria. From this analysis, the computations resulted in a total system accuracy of $\pm 4.5^{\circ}$ 95 percent of the time and $\pm 6.7^{\circ}$ 99 percent of the time. The 4.5° value became the basis for primary area obstacle clearance criteria, airway and route widths, and the ATC separation procedures. The 6.7° value provides secondary obstacle clearance area dimensions.

Primary and Secondary En Route Obstacle Clearance Areas

The primary obstacle clearance area has a protected width of 8 NM with 4 NM on each side of the centerline. The primary area has widths of route protection based upon system accuracy of a $\pm 4.5^{\circ}$ angle from the NAVAID. These 4.5° lines extend out from the NAVAID and intersect the boundaries of the primary area at a point approximately 51 NM from the NAVAID. Ideally, the 51 NM point is where pilots would change over from navigating away from the facility, to navigating toward the next facility, although this ideal is rarely achieved. [Figure 2-38]

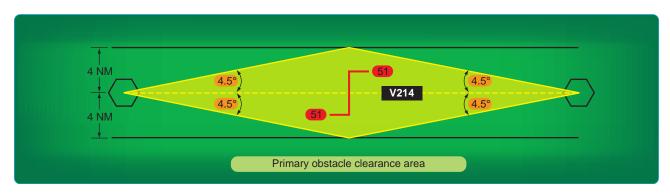


Figure 2-38. Primary obstacle clearance area.