1. Circling approach protected areas are defined by the tangential connection of arcs drawn from each runway end (see FIG 5-4-29). Circling approach protected areas developed prior to late 2012 used fixed radius distances, dependent on aircraft approach category, as shown in the table on page B2 of the U.S. TPP. The approaches using standard circling approach areas can be identified by the absence of the "negative C" symbol on the circling line of minima. Circling approach protected areas developed after late 2012 use the radius distance shown in the table on page B2 of the U.S. TPP, dependent on aircraft approach category, and the altitude of the circling MDA, which accounts for true airspeed increase with altitude. The approaches using expanded circling approach areas can be identified by the presence of the "negative $C$ " symbol on the circling line of minima (see FIG 5-4-30). Because of obstacles near the airport, a portion of the circling
area may be restricted by a procedural note; for example, "Circling NA E of RWY 17-35." Obstacle clearance is provided at the published minimums (MDA) for the pilot who makes a straight-in approach, side-steps, or circles. Once below the MDA the pilot must see and avoid obstacles. Executing the missed approach after starting to maneuver usually places the aircraft beyond the MAP. The aircraft is clear of obstacles when at or above the MDA while inside the circling area, but simply joining the missed approach ground track from the circling maneuver may not provide vertical obstacle clearance once the aircraft exits the circling area. Additional climb inside the circling area may be required before joining the missed approach track. See Paragraph 5-4-21, Missed Approach, for additional considerations when starting a missed approach at other than the MAP.

FIG 5-4-29
Final Approach Obstacle Clearance


NOTE-
Circling approach area radii vary according to approach category and MSL circling altitude due to TAS changes see FIG 5-4-30.

