



Figure 20-10. Rectangular course. The numbered positions in the text refer to the numbers in this illustration.

aligned with the downwind corner of the field. However, since the crosswind is now pushing you away from the field, you must establish the proper drift correction by flying slightly into the wind. Therefore, the turn to crosswind should be greater than a 90° change in heading (position 3). If the turn has been made properly, the field boundary again appears to be one-fourth to one-half mile away. While on the crosswind leg, the wind correction should be adjusted, as necessary, to maintain a uniform distance from the field boundary (position 4).

As the next field boundary is being approached (position 5), plan the turn onto the upwind leg. Since a wind correction angle is being held into the wind and toward the field while on the crosswind leg, this next turn requires a turn of less than 90°. Since the crosswind becomes a headwind, causing the groundspeed to decrease during this turn, the bank initially must be medium and progressively decreased as the turn proceeds. To complete the turn, time the rollout so that the gyroplane becomes level at a point aligned with the corner of the field just as the longitudinal axis of the gyroplane again becomes parallel to the field boundary (position 6). The distance from the field boundary should be the same as on the other sides of the field.

On the upwind leg, the wind is a headwind, which results in an decreased groundspeed (position 7). Consequently, enter the turn onto the next leg with a fairly slow rate of roll-in, and a relatively shallow bank (position 8). As the turn progresses, gradually increase the bank angle because the headwind component is diminishing, resulting in an increasing groundspeed. During and after the turn onto this leg, the wind tends to drift the gyroplane toward the field boundary. To compensate for the drift, the amount of turn must be less than 90° (position 9).

Again, the rollout from this turn must be such that as the gyroplane becomes level, the nose of the gyroplane is turned slightly away the field and into the wind to correct for drift. The gyroplane should again be the same distance from the field boundary and at the same altitude, as on other legs. Continue the crosswind leg until the downwind leg boundary is approached (position 10). Once more you should anticipate drift and turning radius. Since drift correction was held on the crosswind leg, it is necessary to turn greater than 90° to align the gyroplane parallel to the downwind leg boundary. Start this turn with a medium bank angle, gradually increasing it to a steeper bank as the turn progresses. Time the rollout to assure paralleling the