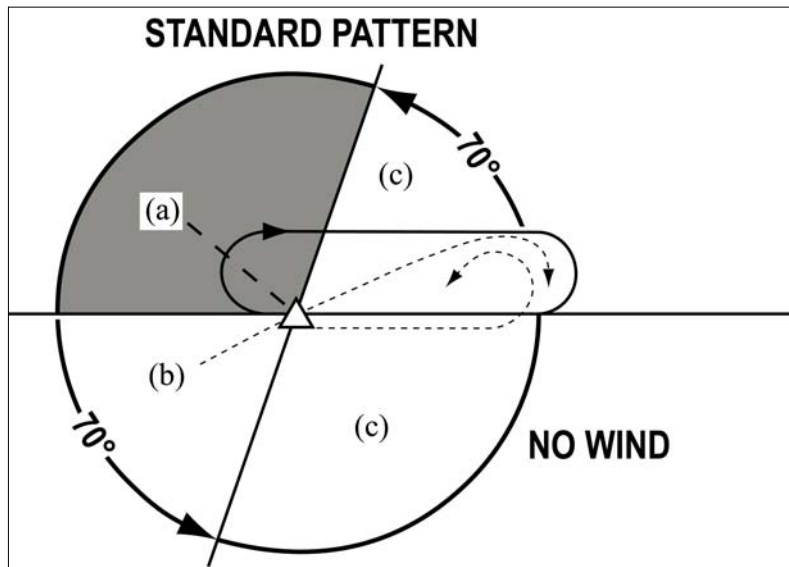


FIG 5-3-4  
Holding Pattern Entry Procedures



**3. Entry Procedures.** Holding protected airspace is designed based in part on pilot compliance with the three recommended holding pattern entry procedures discussed below. Deviations from these recommendations, coupled with excessive airspeed crossing the holding fix, may in some cases result in the aircraft exceeding holding protected airspace. (See FIG 5-3-4.)

**(a) Parallel Procedure.** When approaching the holding fix from anywhere in sector (a), the parallel entry procedure would be to turn to a heading to parallel the holding course outbound on the nonholding side for one minute, turn in the direction of the holding pattern through more than 180 degrees, and return to the holding fix or intercept the holding course inbound.

**(b) Teardrop Procedure.** When approaching the holding fix from anywhere in sector (b), the teardrop entry procedure would be to fly to the fix, turn outbound to a heading for a 30 degree teardrop entry within the pattern (on the holding side) for a period of one minute, then turn in the direction of the holding pattern to intercept the inbound holding course.

**(c) Direct Entry Procedure.** When approaching the holding fix from anywhere in sector (c), the direct entry procedure would be to fly

directly to the fix and turn to follow the holding pattern.

**(d)** While other entry procedures may enable the aircraft to enter the holding pattern and remain within protected airspace, the parallel, teardrop and direct entries are the procedures for entry and holding recommended by the FAA, and were derived as part of the development of the size and shape of the obstacle protection areas for holding.

**(e) Nonstandard Holding Pattern.** Fix end and outbound end turns are made to the left. Entry procedures to a nonstandard pattern are oriented in relation to the 70 degree line on the holding side just as in the standard pattern.

#### 4. Timing.

##### (a) Inbound Leg.

- (1) At or below 14,000 feet MSL: 1 minute.
- (2) Above 14,000 feet MSL: 1<sup>1</sup>/<sub>2</sub> minutes.

##### NOTE-

*The initial outbound leg should be flown for 1 minute or 1 1/2 minutes (appropriate to altitude). Timing for subsequent outbound legs should be adjusted, as necessary, to achieve proper inbound leg time. Pilots may use any navigational means available; i.e., DME, RNAV, etc., to ensure the appropriate inbound leg times.*

**(b) Outbound leg** timing begins over/abeam the fix, whichever occurs later. If the abeam position