

Instrument Flying Handbook (FAA-H-8083-15B) Addendum B:  
False Courses  
November 2019

The following will replace the content found on page 9-40 under “ILS Errors”:

2. False courses. In addition to the desired course, glideslope (GS) facilities inherently produce additional courses at higher vertical angles. These false courses occur at angles between approximately  $6^\circ$  and  $12^\circ$ . Some false courses (false null) resemble a normal  $3^\circ$  GS, but are at a steeper angle or at the wrong location and may result in a high descent rate if followed, while other false courses (signal reversal) occur when the signal is reversed (i.e., signal transitions from a “fly-down” command to a “fly-up” command) and depending on the GS capture logic, may result in the aircraft pitching up. The type of false course is dependent on the GS antenna type, but in general, signal reversals will occur at  $9^\circ$ , false nulls will occur at  $12^\circ$ , and both may occur around  $6^\circ$ . Although indications of an abnormal condition may be present, flight crews should be aware that there may be no warning prior to crossing a false GS. Specific airplane indications and autoflight responses when approaching or capturing a false GS are aircraft-dependent; therefore, operating and/or training manuals should be referenced for additional information regarding the consequences of capturing a false GS and for guidance to detect and prevent false GS captures.

Note that, if the approach is conducted at the altitudes specified on the appropriate approach chart (GS captured from below), these false courses are not encountered. Intercepting the GS from above increases both the possibility of a non-stabilized approach and the risk of capturing a false GS. Flight crews should also maintain flight path awareness (i.e., altitude vs. distance crosschecks) during the approach to ensure false GSs are not encountered or followed.