The Three Definitions of Night

May 09 2011 by David Zitt

Perhaps only in aviation could we come up with three different (and sometimes confusing) definitions for the same word, **night**. These three definitions are often a source of confusion for new student pilots. The different definitions for night are in reference to the requirements to operate navigation lights, when you are able to log night time in your logbook, and when you must complete your landings required by the regulations to carry passengers at night. If you ask most students about this topic, many might answer with two different definitions, but in fact there are three, and the third is often the source of confusion.

Let's look at each requirement:

- <u>Navigation Lights</u> per FAR 91.209 (a) you cannot operate an aircraft without operating lighted position lights from **Sunset to Sunrise**.
- Recent Flight Experience per FAR 61.57 (b) no person may act as pilot in command of an aircraft carrying passengers during the period of 1 hour after sunset and ending 1 hour before sunrise, unless in the proceeding 90 days that person has made at least three takeoffs and three landings to a full stop during the period beginning 1 hour after sunset and ending 1 hour before sunrise ...
- Logging Night Time per FAR 1.1 the definition of night time is the time between theend of
 evening civil twilight and the beginning of morning civil twilight, as published by
 the American Air Almanac, converted to local time.

Each one of these is fairly simple and straight forward. The only detail that students often forget is to recall that night recent flight experience requires landings to be made to a **FULL STOP**. In addition, one area that is not always looked up correctly is the time for civil twilight. Before the invention of the internet, you would have to find a printed copy of the American Air Almanac and look up your time table for your local area. Thanks to the wonders of the internet, you can visit a simple website and give your closest major city for the correct local times (be careful to convert for DST).

So, you are probably wondering why this is so confusing for some students. Well, the answer comes in this scenario. Let's say that we are going to do a local night flight here in Cincinnati, Ohio on May 2nd, 2011. After reviewing the table for the American Air Almanac, we discovered that the local sunset (adjusted) is 20:32 local and the evening civil twilight is 21:01 local. So we would be logging night time starting at 21:01 local, but our landings that we are practicing wouldn't count towards recent flight experience requirements until a pattern circuit starting after 21:32 local. There would be 31 minutes of logged night flight time that the landings wouldn't count to carry passengers.

In short, make sure that if you are going to log a night landing in your logbook that it also meets the requirements for 1 hour after sunset or make a notation that it doesn't count to be sure you are in compliance with the regulations.