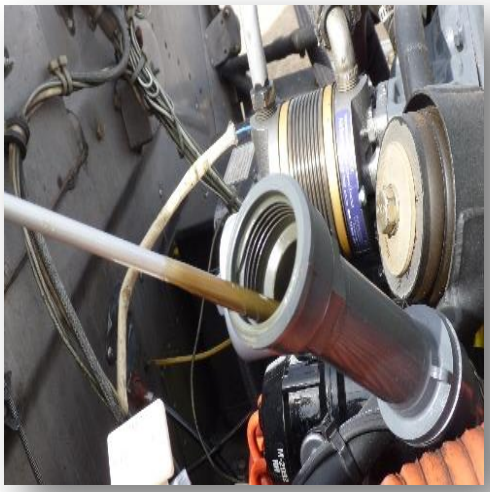
Jerry Sorrell in his career days.

Aircraft Engine Oil Dipstick Errors

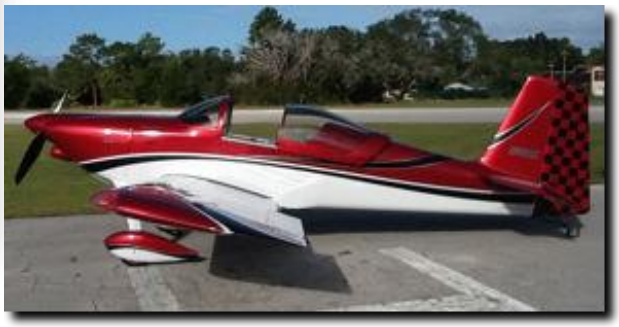
Lycoming engines come with different lengths of dipsticks depending on the application. Same for Continentals.

Engines that are deep under the cowl may have a plastic extension off the crankcase to put the end of the dipstick nearer the pilot's grasp. This dipstick will therefore be made longer in order to reach the oil level. For example, there may be a number of dipstick lengths for the standard O-320 E2D engine, depending on the aircraft application. There is not a standard off the shelf dipstick that "fits all" with respect to the oil level markings.

Let's assume two builders obtain identical engines for their RV projects. One engine is installed in an RV-7 and the other in an RV-7A.



RV Aircraft Images courtesy copyright VansAircraft.com



The RV-7 sitting on its tail wheel will register a different oil level than the tri-gear 7-A due to the different angle of the engines.

What to do? Be sure all the oil has been drained from the engine, and then perform a quart by quart comparison of oil added with the mark on the dipstick. Yes, this will take some time, but why not calibrate the dipstick for your particular application?

Another tip from the Light Plane Maintenance magazine: Checking the oil level in the engine after running should done after the oil has had chance to run off and settle in the sump. The larger Lycoming and Continentals will vary as much as 2 quarts when measured at shut down and measured again ½ hour later. Look out not to overfill the engine on the assumption the oil is down, when it only needs some time to settle out.