GAMI Lean Test

- Set power for 65% or less
- Set mixture for 100º rich of peak and note the fuel flow in GPH or PPH. That's your “rich” setting.
- Slowly lean until the onset of roughness. Try for a consistent rate of change throughout the test.
- At the onset of roughness, note the fuel flow in GPH or PPH. That's your “lean” setting.
- Reverse direction and richen back to your “rich” setting.
- At 100º ROP, reverse direction and lean to your “lean” setting.
- We prefer to analyze a set of three rich-to-lean-to-rich cycles.

In-Flight LOP Mag Check (singles with rotary style magneto switches)

- Lean to your “lean” setting from the GAMI Lean Test above
- Select BOTH-LEFT-BOTH-RIGHT-BOTH. Minimum 30 seconds, maximum 60 seconds on each setting.
- Note the level of roughness (smooth or moderate) on each individual mag*

In-Flight LOP Mag Check (twins with individual magneto switches)

- Start with the L engine. With BOTH mags firing, turn off the RIGHT MAGNETO. Minimum 30 seconds, maximum 60 seconds.
- Turn the RIGHT MAGNETO back on so both mags are firing. Minimum 30 seconds, maximum 60 seconds.
- Turn off the LEFT MAGNETO. Minimum 30 seconds, maximum 60 seconds.
- Turn the LEFT MAGNETO back on so both mags are firing. Minimum 30 seconds, maximum 60 seconds.
- Note the level of roughness (smooth or moderate) on each individual mag*
- Perform the same set of mag switching for the R engine.

* It's normal for engines to run a bit rougher on one magneto than they do on two. If roughness is moderate, richen slightly then begin the test again. (FF should be consistent throughout the test). Don't compromise safety - abort the test if roughness is intolerable during one-mag ops.

When you submit the data for analysis, it helps if you report on the level of perceived roughness (smooth or moderate) on each mag.