

**Reinhardt, Nick**

**From:** Jim & Sara Feldman [feldmans@rcn.com]  
**Sent:** Tuesday, July 20, 2004 8:18 PM  
**To:** Kirby, Alan; j.a.kirby@rcn.com; Christopher Blizzard; John Champeny; Carl Jenkins; Frank Rosetti; John Jessen; Neil & Elinor Olken; Reinhardt, Nick; Paul Bauer; Barry Puchkoff; Reed Holden; Paul Robertson; Roland (Skip) Boucher; Jim Tull; Tom Witkin  
**Subject:** 206 items

Hi:

Neil and I took the 206 out for some approaches and chose EWB (New Bedford) as our outbound target to get a little time on the Gami's. We were assigned 3000'. After climb out, the fuel flow was set to 12.5 to 13 gph and lean of peak by 75°. We kept the cowl open one click, so CHT's were comfortably between 370° and 340°. Engine was running smoothly and we were getting airspeeds in the low 130's. Neil flew for 0.9 hours and I for 1.0 (I on right tank and Neil on left). We filled up at BED. He was just under 12 gallons and I was 12.7.

As you go LOP, you will find that the mixture control quickly drops the fuel flow and thus power to values below what you want. Increase the throttle setting to bring the fuel flow/power back to where you want it. We were running at 24 inches and 2300 RPM -- slightly over square, but both in the green and a fine place to operate. If you were higher, where the atmospheric pressure is below 24 inches, you can increase fuel flow by increasing RPM. Above about 10,000', you simply have to be satisfied with less than 60% power, but air drag is way down and you are probably there because:

- You have a wonderful tailwind and don't need more than 60%;
- The weather below is awful and you will take what you can get from the engine;
- You are out west and 12,000' just gets you over the pass

Here is the rule:

70% ==> 14.7 GPH  
 65% ==> 13.6 GPH  
 60% ==> 12.7 GPH

Thus, we were flying at about 60%. 65% would have been fine.

In support of our effort to get the most out of our engine analyzer, I reset the CHT warning flag on the engine analyzer to go off at 400° rather than the factory setting of 450°. 380° is our nominal upper bound. You can cool the cylinder heads by opening the cowl, going full rich (under 4000') or going more lean, as long as the engine is running smoothly. Anywhere but at or near peak. Keep the CHT numbers under 400° at all times and we might well get 2000 hours on this nice and very expensive engine.

Jim

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