

Chapter 2

Aircraft Systems

1. What is the difference between *detonation* and *preignition*?

2. What could be wrong if the engine continues to run with the master switch in the off-position?

3. After crossing the Cascades I reduced power and the decent was uneventful. However, upon reaching the bottom of decent over Lake Whatcom, the engine was very rough and delivered no meaningful power. What did I forget to do?

4. There is an old saying among long duration bicyclists that lots of peddling means good knees. That is, choosing a slightly lower gear that requires more peddling is better for your knees than a higher gear and less peddling. Why?

5. Why should you avoid low-rpm and high manifold pressures?

6. While automotive turbochargers and aviation turbochargers provide forced induction, how do their purposes differ?

7. What are the four strokes of a *diesel* engine?
