MAINTENANCE
By: Rick Farmer
The “Whistle Slot”

Have you been checking the crankcase breather during your preflight inspection? This time of year it is extremely important to pay special attention to this simple but important system on your aircraft if you are operating in cold weather.

Surprisingly, many pilots when asked this question will give you a blank stare followed by the typical... Huh...?

The breather tube which vents engine crankcase moisture and maintains proper internal pressure as your altitude increases, can ice up in cold weather. If the breather becomes blocked with ice, the back pressure that forms inside the engine can blow out oil seals causing a rapid loss of oil and damage or a complete engine failure.

An excerpt from an edition of the Lycoming Flyer, entitled "The Whistle Slot", states:

"Moisture is expelled from the engine crankcase through the breather tube which often extends through the bottom of the engine cowling into the air stream. Under very cold conditions, this moisture may freeze and continue a buildup of ice until the tube is completely blocked. It is normal practice for the airframe manufacturer to provide some means of preventing freeze-up of the crankcase breather tube. The breather tube may be insulated, it may be designed so the end is located in a hot area, it may be equipped with an electric heater, or it may incorporate a hole, notch or slot which is often called a "whistle slot."

The operator of any aircraft should know which method is used for preventing freezing of the breather tube, and should insure that the configuration is maintained as specified by the
airframe manufacturer. Because of its simplicity, the "whistle slot" is often used. Although the end of the tube may extend into the air stream, a notch or hole in the tube is located in a warm area near the engine where freezing is extremely unlikely. When a breather tube with whistle slot is changed, the new tube must be of the same design.

Do you know which method your aircraft's manufacturer used to prevent freezing of the breather tube? Do you know where it's located, and how to check it?