



SUBJ: Landing Gear, Tire Tube. Goodyear Aviation Tires, Flight Mate Butyl Inner Tube, 7.00-8.00-6. **SAIB:** CE-11-47R1
Date: January 30, 2012

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin (SAIB) alerts operators, pilots, and aircraft manufacturers of possible inner tube failures made from butyl rubber by **Goodyear Aviation Tires, (Goodyear)**.

At this time, the failure of the inner tubes is not an unsafe condition that would warrant airworthiness directive (AD) action under Title 14 of the Code of Federal Aviation Regulations (14 CFR) part 39.

The SAIB has been revised to incorporate updated information from Goodyear and highlight inner tube failures are not limited to only cold weather operations.

Background

There have been several reports of Goodyear inner tubes failures during cold weather operations. The failures were reported following short flights or following ground operations. Goodyear is aware of these failures and has made several attempts to improve the cold weather performance of its inner tubes. In November 2008, Goodyear incorporated a change to its compound for their butyl rubber inner tubes. Since then, the reliability of the inner tubes had increased, but cold weather failures were still reported. Therefore, Goodyear has started to test another improvement to their butyl rubber inner tubes made from an updated compound. Following successful field testing, Goodyear will make the improved inner tubes available.

Goodyear inner tube failures are not limited to only cold weather operations, additional failures have been reported. Goodyear is aware of the issues from the field and began an improvement program to investigate and improve the inner tubes. A flex crack was occasionally observed on the natural fold from the extrusion process during manufacturing. The compound was modified to reduce the impact of extrusion, optimize splicing pressure and improve flex which should improve crack resistance. Additionally cold temperature properties of the tube were improved to further enhance performance for cold temperature operations. Inner tubes were produced with the improved compound and field tested with positive results. As of August 15, 2011 the production has been changed over to the modified compound for 5.00-5 inner tubes.

Recommendations

The FAA recommends you provide special attention during pre-flight to airplane tires with Goodyear butyl rubber inner tubes by:

- Checking to ensure that all tires are properly inflated and are holding pressure;
- Being prepared to compensate for a flat tire during landing as this might pull the airplane to the affected side; and
- Providing extra awareness during cross wind landing conditions on narrow and on short runways.

Owners of airplanes with Butyl Rubber inner tubes, made by Goodyear, should contact Goodyear for further information.

For Further Information Contact

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