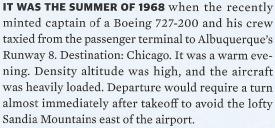
Rabbits on the runway

Check and check again



As the captain began to advance the thrust levers for takeoff, the cockpit calm was shattered by the intrusive blare of the takeoff warning horn. Something was obviously wrong. The horn sounds only when something is improperly configured for takeoff. The captain reduced power to idle and taxied off the runway. At the captain's behest, the first officer explained to the passengers over the public-address system that the takeoff had been aborted because of "rabbits on the runway."

The crew then checked to ensure that the spoilers were properly stowed, the stabilizer trim was positioned in the green band, and the wing flaps were properly deployed—to 5 degrees, in this case. Everything was as it should be.

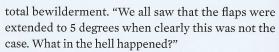
The captain initiated another takeoff, at which time the warning horn sounded again, seemingly with greater urgency. "More rabbits," it was again explained.

Systems were once again checked. Everything was as it should be.

All three pilots—the third was a flight engineer—agreed that the horn was a false alarm. It had to be. Everything tied into the warning system was positioned and configured properly. The captain then asked the engineer to pull the appropriate circuit breaker and deactivate the horn.

As the "three-holer" gathered speed and reached about 100 knots during its third takeoff attempt, the first officer screamed, "My God! It's the flaps! Abort! Abort!" Which is exactly what the captain did. Immediately. The aircraft came to an abrupt halt uncomfortably close to the end of the runway, its nose pointing into the darkness that had almost enveloped them.

The aircraft again taxied off the runway, this time with smoking tires and overheated brakes. There was no mention of rabbits. The first officer pointed out that the flap gauge indicated 2 degrees, not the 5 degrees that was required for a safe takeoff. (This also meant that some of the leading-edge devices were still retracted.) "How can this be?" the co-pilot asked in



BY BARRY SCHIFF

What makes this event so fascinating is that all three crewmembers on that airline flight had looked several times but did not see the 2-degree indication. Instead, all of them "saw"—or thought they saw—a 5-degree indication, because that is what they had been conditioned to expect.

Had this takeoff been continued, the heavily loaded Boeing likely would not have become airborne in the available distance. The passengers and crew—and some of the rabbits that really do live near the runway—likely would have been sacrificed on the altar of checklist complacency.

The antidote for this kind of complacency is to force yourself to look and not simply glance at each item mentioned on a checklist. Ask yourself if you really do see what you expect or hope to see. This process takes a little longer but better ensures checklist compliance.

A pet peeve of mine involves those who use a checklist—especially the Before Takeoff Checklist—as if it were a set of instructions. They regard each item on the list as a reminder of what needs to be done. Someone who uses a checklist in this manner often neglects items that might not be included on a list (such as turning on the pitot heat prior to departing into actual instrument conditions).

The proper way to use a checklist is to initially not use it at all. Instead, use a visual flow pattern, an organized method of attending to every switch, control, and instrument in the cockpit. Touch each item and spend enough time with it to ensure that it really does indicate, operate, or is positioned as desired. After everything is checked in this manner, then use the checklist for its intended purpose: to verify that critical items have not been overlooked.

To save time, some pilots run through their checklist while taxiing for takeoff, a wonderful way to bend metal.

You might be interested to know that the first aircraft provided with a checklist was the Boeing B–17 Flying Fortress. This was the result of an accident on October 30, 1935, during which a takeoff had been attempted in a prototype of the B–17 with the elevator control lock installed.

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recently logged his 28,000th hour and has flown 361 different types of aircraft.