



SAIB: SW-11-61

SUBJ: Honeywell (formerly Bendix King) KRA 405B Radio Altimeter

Date: September 29, 2011

This is information only. Recommendations aren't mandatory.

Introduction

This Special Airworthiness Information Bulletin is to inform owners and operators of aircraft equipped with the KRA 405B Radar Altimeter of a potential undetected failure condition, wherein the Radar Altimeter may provide erroneous altitude information. At this time, this airworthiness concern 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.

Background

The KRA 405B Radar Altimeter may not detect the failure of certain internal components. Under these failure conditions, the KRA 405B might provide undetected erroneous altitude data. Since the failure is not detected, the probability of providing erroneous data without an associated warning is increased. This failure condition of unannounced erroneous altitude has, thus far, become evident through the radar altitude height indication constantly drifting between approximately 800ft. to 1200ft. The altitude drift indication cycle is approximately four seconds to repeat. Once this failure condition occurs, it remains constant, so while unannounced, it will become evident to the flying pilot through normal instrument scan. Barometric and GPS altitude indications are not affected by this failure condition. If other aircraft systems, such as Automated Flight Control System, utilize the radar altimeter altitudes, those systems behavior would be adversely affected by this failure condition.

Honeywell is actively working towards a design improvement of the monitor system that will address the undetected erroneous altitude data. When available, it will be implemented into the design of the KRA 405B system.

Recommendations

We recommend that owners and operators of aircraft equipped with the Honeywell KRA 405B radar altimeter system review their particular aircraft configuration and integration, to be freshly aware of which systems utilize radar altitude, and how the described failure condition would affect those systems. We also remind pilots that radar altitude information is supplemental to barometric altitude, and to fly conservatively, not relying solely on radar altitude information. Further, for pilots to be aware of the described failure condition, so it can be more readily identified in the event they experience this failure in their KRA 405B radar altimeter system. These same recommendations would also be applicable to any aircraft equipped with a radar altimeter, as a standard practice.

For Further Information Contact

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